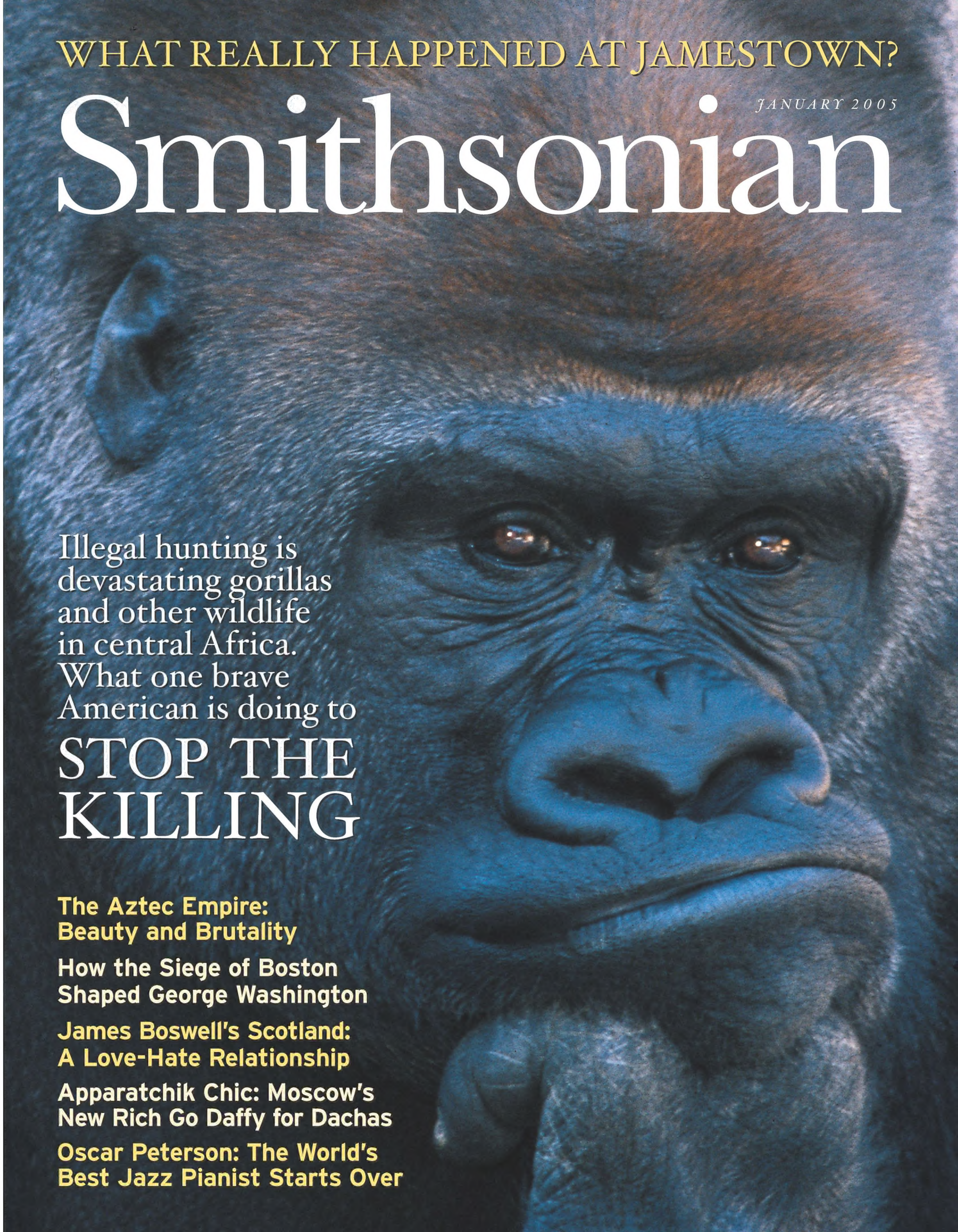
WHAT REALLY HAPPENED AT JAMESTOWN?

JANUARY 2005

Smithsonian



Illegal hunting is devastating gorillas and other wildlife in central Africa. What one brave American is doing to

STOP THE KILLING

The Aztec Empire: Beauty and Brutality

How the Siege of Boston Shaped George Washington

James Boswell's Scotland: A Love-Hate Relationship

Apparatchik Chic: Moscow's New Rich Go Daffy for Dachas

Oscar Peterson: The World's Best Jazz Pianist Starts Over

we see

a label with your name on it.

It starts with an idea; with passion and creativity, and maybe a little luck, it grows into a business. We see the potential in small businesses. It inspires us to create software that helps them from their very first steps to as far as they can go. microsoft.com/potential

Your potential. Our passion.™

Microsoft®

© 2004 Microsoft Corporation. All rights reserved. Microsoft and "your potential. Our passion." are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

The meru danda, or the spine.

Ancient wisdom compares it with a shining golden mountain called Meru, the axis of the universe. The danda-asana straightens and strengthens the spine, the axis of our mind, body and soul. Indeed, like Yoga and Ayurveda, India offers many stopovers for the traveller on a journey of self-discovery. It's an experience that's truly incredible.

Incredible India

ny@itonyc.com www.incredibleindia.org 1-800-953-9399

Production line of Toyota's Georgetown, KY manufacturing plant, where the Avalon, Camry and Solara are built.

Our vehicles don't just take people to work, they put people to work.

For many Americans, Toyota is more than just a source of transport, it's a source of income. With our eight manufacturing plants, sales and marketing operations, research and design facilities, and through our dealers and suppliers, Toyota's U.S. operations are responsible for more than 190,000 jobs. Last year, Toyota team members built more than one million vehicles in the U.S.* And with two new manufacturing plants on the way, we're working to create even more jobs and opportunities in the communities where we do business.

*Toyota components and vehicles are made using many U.S. sourced parts. ©2004

toyota.com/usa

TOYOTA

HOW TO

SEE

THE WORLD

differently

Someday, when your grandchildren ask you what you did in life, wouldn't it be nice to say, "Well, I saw the world from the cockpit of a MiG-25." You'll endure the rigors of cosmonaut training and see the planet from a breathtaking 82,000 feet. MiG-25 flights. Another way the Membership Rewards® program from American Express makes life less ordinary. To apply, call 1.800.THE CARD or visit americanexpress.com to learn more.

A WORLD OF SERVICE℠

©2004 American Express Company. Enrollment in the Membership Rewards® program and the payment of an annual program fee. Edge of Space-MiG-25 Flight from Space Adventures® is not available to Cardmembers who are enrolled in the Membership Rewards program or the Membership Rewards Options® program. Terms, conditions and restrictions apply.

There's a place,
where a rock is a mountain.
The sky reaches down to your boots.
Museums are outdoors,
stories are painted, not spoken,
and dreamtime follows you home.
A different culture.
A different yesterday.
A different light.

Australia
australia.com

Australia. An island of open arms that reach out across a continent of natural wonders. Explore the incredible range of Aussie experiences beginning with the urban elegance of the Sydney Opera House to the raw beauty of Uluru (Ayers Rock). Take the first step toward an unforgettable vacation that's just right for you. The entire country is literally at your fingertips when you visit Australia.com.

Smithsonian

JANUARY 2005 VOLUME 35, NUMBER 10

"Washington was not clairvoyant about history's next destination. But he realized that wherever history was headed, he and America were going there together."

—"WASHINGTON TAKES CHARGE," PAGE 92

FEATURES

40 STOP THE CARNAGE

In the lush rain forests of central Africa, an American primatologist fights to halt the greatest threat to wildlife: the killing of animals for food

BY PAUL RAFFAELE

48 RETHINKING JAMESTOWN

Recent discoveries are challenging long-held views of the first Virginia colonists as indolent and inept

BY JEFFERY L. SHELER / PHOTOGRAPHS BY LYNDA RICHARDSON

56 RETURN OF A VIRTUOSO

In 1993 "maharajah of the piano" Oscar Peterson suffered a disabling stroke. Now, at 79, the jazz great is tickling the ivories with newfound joy

BY MARYA HORNBACHER

64 JAMES BOSWELL'S SCOTLAND

Though the biographer of Samuel Johnson was shaped by Scotland and spent most of his life there, he felt decidedly ambivalent about the place

BY TOM HUNTINGTON

76 THE AZTECS: BLOOD AND GLORY

A new exhibition of Aztec art shines light on one of the most dazzling—and darkest—civilizations in all of history

BY DAN HOFSTADTER

86 CABIN FEVER

On the outskirts of Moscow, newly monied entrepreneurs and other professionals are going gaga over their dachas

BY CRAIG MELLOW / PHOTOGRAPHS BY JEREMY NICHOLL

92 WASHINGTON TAKES CHARGE

At the siege of Boston, the new commander of the Continental Army polished the persona that would carry him to victory—in war and peace

BY JOSEPH J. ELLIS

RÉUNION DES MUSÉE NATIONAUX / ART RESOURCE, NEW YORK

As commander in chief of the Continental Army, Washington (in a contemporaneous portrait by artist Samuel King) demanded complete loyalty from his aides.

ON THE COVER: In the past two decades, the ape population in the Congo Basin has dropped from about 110,000 to fewer than 40,000. Photograph by Mark Newman / Stock Connection

Leave your routine

for an Alaska experience that's anything but.

scape

A Princess® Gulf of Alaska Cruisetour is the ultimate cruise, rail and lodge vacation. Only Princess offers the Glacier Bay Champagne Breakfast, where your balcony becomes your front-row seat for one of nature's most breathtaking shows.

Africa • Alaska • Antarctica • Asia • Australia • Caribbean

©2004 Princess Cruises. Ships of British, Bermudan and Gibraltar registry.

completely.

GET YOUR FREE ALASKA PLANNING KIT TODAY.
Call 1.800.PRINCESS or visit us at princess.com

Two glacier-viewing opportunities – Glacier Bay and College Fjord. Five wilderness lodges in the best locations. And luxury rail cars that take you straight from the ship for more time at spectacular Denali National Park. Book your complete escape today.

PRINCESS CRUISES
escape completely™

Europe • Greece • Hawaii • India • New Zealand • Panama Canal • Russia • South America • Tahiti

Smithsonian

JANUARY 2005 VOLUME 35, NUMBER 10

MICHEL ZABÉ AND ENRIQUE MACIAS (ORIGINALLY PUBLISHED IN AZTECS © ROYAL ACADEMY OF ARTS, LONDON

"The practice of human sacrifice, both a sacred duty and, arguably, a terroristic political tool, has tended to prejudice outsiders' views of the Aztecs."

—"THE AZTECS: BLOOD AND GLORY," PAGE 76

DEPARTMENTS

22 INDELIBLE IMAGES COMING HOME

To a country divided over the Vietnam War, Sal Veder's 1973 photograph of a POW's joyous reunion with his family promised an uplifting ending. But the story didn't end there

BY CAROLYN KLEINER BUTLER

26 DIGS AHEAD OF ITS TIME?

An excavation of an Illinois town founded by a freed slave provides insights into life in a biracial community in the 1800s

BY DANA MACKENZIE

30 THE OBJECT AT HAND FREEZE FRAME

In his extraordinary "portraits" of individual snowflakes, Vermont farmer and pioneering photomicrographer Wilson Bentley revealed the singular beauty hidden in every flurry

BY OWEN EDWARDS

11 EDITOR'S NOTE TURNING 35

14 FROM THE SECRETARY TINY TREASURES

16 LETTERS Luna the whale; Alexander the Great; Indah the orangutan . . .

19 THE YEAR WE WERE BORN Biafra; the Chicago Seven . . .

32 LEWIS AND CLARK DANGEROUS LIAISONS

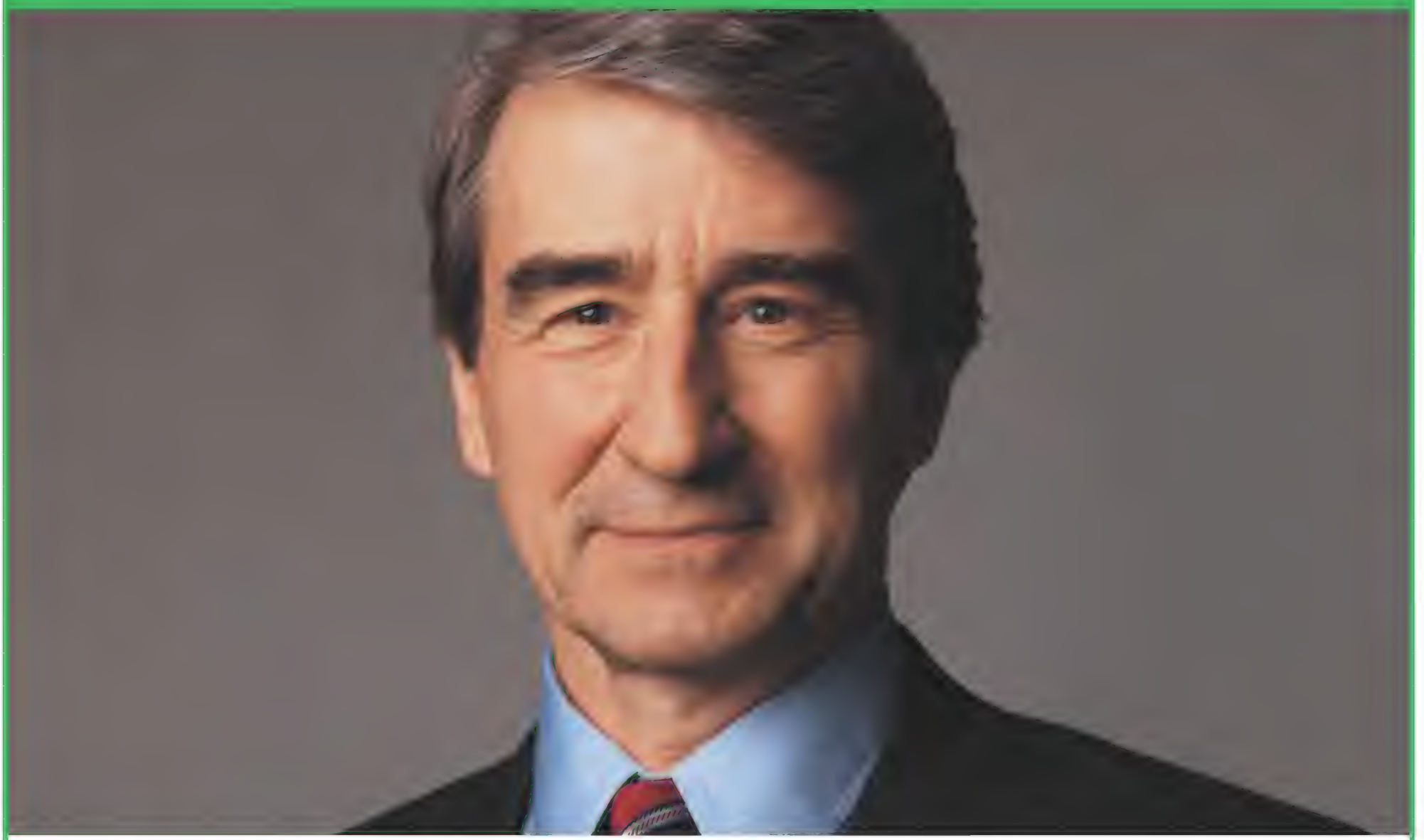
35 AROUND THE MALL Fossilized crinoids; song catcher . . .

38 THIS MONTH IN HISTORY Neon signs; Lindbergh kidnapping trial

104 PHOTO FINISH "I DO SOLEMNLY SWEAR . . . "

The 1978 excavation in Mexico City of the Great Pyramid of Tenochtitlan led to the unearthing of a trove of artifacts, including this life-size eagle warrior.

VISIT SMITHSONIAN MAGAZINE ON-LINE. For further reading on our story topics, more images from our photographers, listings of events and exhibitions at the museums, information on Smithsonian Journeys Educational Travel, or to join our readers' panel, visit www.smithsonianmag.com



"Objective, independent, third-party research." Can your broker say that?

FREE TRADES FOR A MONTH

Open an account online at
tdwaterhouse.com/freetrades
and enter offer code **MRCSSF**.

CONTACT US AT:
1.800.tdwaterhouse
tdwaterhouse.com
Online trades as low as $9.95

At TD Waterhouse, you can feel confident in the objectivity of the research and information they provide. Because it comes from independent, third-party sources. Not in-house research analysts.

You'll find offerings like MarketEdge Second Opinion. Standard & Poor's Reports. Reuters ProVestor Plus. Vickers Insider Trading Chronologies. Standard & Poor's *The Outlook*. And Standard & Poor's Five STAR Stock Reports. And it's all FREE.

It is also easy to use, thanks to tools like their Stock Screeners that let you "screen" for investment ideas according to various criteria, including 10 pre-defined Standard & Poor's strategies.

So if your current broker's lack of objectivity is a concern, check out TD Waterhouse. They make it easy to switch, and easy to invest on your own.

You can do this. Switch today to TD Waterhouse. The alternative to higher-priced brokers.

TD Waterhouse
You're in Control.

©2004 TD Waterhouse Investor Services, Inc. Member NYSE/SIPC. Comparison based on survey of standard equity commissions as of 3/17/04. Services vary by firm. Access to services and your account may be affected by market conditions, system performance or for other reasons. Third-party research obtained from sources deemed reliable; however, TD Waterhouse does not guarantee its accuracy or completeness and makes no warranties with respect to results to be obtained from its use. Online market orders are $9.95-$17.95 depending on trading activity. Limit orders just $3 more. Trades over 2,500 shares incur 1 cent per share charge for the entire order. Call or see tdwaterhouse.com for complete commission fee schedule. To be eligible for this promotion, account must be opened by 10/31/05; free trades are valid 30 days from account funding; accounts must be funded within 90 days from the date the account is opened. Each free trade valued up to $45. Offer valid for new customers only who open individual, joint, retirement, trust, or Coverdell Education Savings accounts. Custodial, partnership, 529 College Savings Plan, and corporate accounts are not eligible. Funds transferred from existing TD Waterhouse accounts are not eligible. One offer per person; U.S. residents only; void where prohibited; standard terms and conditions apply; offer subject to change at any time without notice. Maintenance fees may apply to accounts with balances or trading frequency below specified minimums.
CODE: MRCSSF
TDW3851

CULTURE SPOTTER.COM

MARCH - MAY 2005

Welcome to CultureSpotter.com, a monthly listing of some of the most interesting cultural events around the globe. *(Dates subject to change)*

For more information, visit www.culturespotter.com.

Apr Mar

March 6 - 25
CAPE TOWN FESTIVAL
Cape Town, South Africa
www.capetownfestival.co.za

March 26 - April 11
NATIONAL CHERRY BLOSSOM FESTIVAL
Washington, D.C.
www.nationalcherry blossomfestival.org

April 1 - 17
THE MONTE-CARLO SPRING ARTS FESTIVAL
Monaco, Monaco
www.printemps-des-arts.mc

April 12 - 15
SONGKRAN
Bangkok, Thailand
www.sriwittayapaknam.ac.th/songkran.html

April 15 - 17
UNIQUELY WEST VIRGINIA FESTIVAL
Berkeley Springs, West Virginia
www.berkeleysprings.com/festivals.htm

May

May 11 - 22
CANNES FILM FESTIVAL
Cannes, France
www.festival-cannes.com

May 12 - June 4
SPRING INTERNATIONAL MUSIC FESTIVAL
Prague, Czech Republic
www.festival.cz/index.html

FEATURED LISTING

VOYAGE FROM VENICE TO THE DALMATIAN COAST
May 22 - June 3
View splendid Byzantine art and grand Roman architecture as you cruise from Venice to Dubrovnik aboard the charming ship, *M.Y. Monet*. For more information, call 1-877-EDU-TOUR (1-888-338-8686) or visit www.SmithsonianJourneys.org. For more Journeys see page 97.

Smithsonian Journeys

Smithsonian www.smithsonianmag.com

EDITOR
Carey Winfrey

ART DIRECTOR
Brian Noyes

EXECUTIVE EDITOR
Terence Monmaney

MANAGING EDITOR
Sally Scott Maran

SENIOR EDITORS
Diane M. Bolz
Kathleen M. Burke
James S. Gibney
Laura Helmuth

GENERAL EDITOR
Andrew Curry

PICTURE EDITOR
Bonnie Stutski

COPY CHIEF
Karen Larkins

ASSISTANT MANAGING EDITOR
Alison C. McLean

ASSOCIATE EDITORS
Bruce Hathaway
Marian Smith Holmes
Lucinda Moore
Beth Py-Lieberman

COPY EDITOR
Rebecca Maksel

ASSOCIATE ART DIRECTOR
Erik K. Washam

ASSOCIATE PICTURE EDITOR
Molly Roberts

ASSISTANT EDITORS
E. Anne Bolen
Lyn Garrity
Angela M. Pleasants
Helen Starkweather
Chai N. Woodham

PICTURE DEPARTMENT MANAGER
Carrie D. Shea Schilling

ASSISTANT PICTURE EDITOR
Nell Whiting

ASSISTANT TO THE EDITOR
Andrea Georgiou

EDITORIAL ASSISTANTS
Mimi Kirk
Michelle L. Strange

READER SERVICES
Karla A. Henry
Carolyn McGhee

EDITORIAL OFFICES:
MRC 951, Washington, D.C.
20013-7012
(202) 275-2000

SUBSCRIPTIONS:
(800) 766-2149
P.O. Box 420312
Palm Coast, FL 32142-0312
www.smithsonianmag.com
Outside the United States:
(386) 447-2721

Sorry, but SMITHSONIAN cannot assume responsibility for unsolicited materials.

SMITHSONIAN BUSINESS VENTURES
Gary M. Beer, **CHIEF EXECUTIVE OFFICER**
Jeanny Kim, **DIRECTOR, MEDIA AND CORPORATE DEVELOPMENT**

BOARD OF DIRECTORS
Adolfo Marzol, **CHAIRMAN**
Donald J. Steiner, **VICE CHAIRMAN**
Gary M. Beer, John R. Dailey,
Frank A. Daniels, Jr., Alice Maroni,
M. Ronald Ruskin, Anthony Welters

PUBLISHER
Amy P. Wilkins

GENERAL MANAGER
David R. Kefford

ADVERTISING
Thomas M. Huber, **ASSOCIATE PUBLISHER**
Caryl Heard, **SALES DEVELOPMENT MANAGER**
Marilyn Cruz, **ADVERTISING SERVICES MANAGER**
ACCOUNT MANAGERS
NEW YORK: Gayle Lambert, Meryle Lowenthal, Jill Reid Mullan **SOUTHWEST:** Carol Orr, Nuala Berrels **MIDWEST:** Dick Opfer, Bill Milligan, Mark Rosenbaum, Tanya Amini, Karen Koller **DETROIT:** Don Heth, Angie Rooney, David Sauter, Jill Severini **WEST COAST:** Gary Thompson, Martha Quigley, Cheryl Smith **HAWAII:** Audrey Higuchi **CANADA:** Richard Brown, Cindy Ratych **FLORIDA / CARIBBEAN:** Karen Rames, Jay Stelzer **CENTRAL AMERICA:** Al Nadal **MEXICO / SOUTH AMERICA:** Lorelei Jones, Patricia Echenique **JAPAN:** Simon R. Timmis **EUROPE:** Ken Melville

ADVERTISING ASSISTANTS
Melissa Alvarez, Neal Charles, Arwen Lowbridge

MARKETING
Diane Lowman, **DIRECTOR**
Kelly Cannon, **ASSOCIATE MARKETING DIRECTOR**
Renée Martin, **ART DIRECTOR**
Mary Wright, **TRAVEL MARKETING MANAGER**
Andrew Grant, **PROMOTION MANAGER**
Adam Roth, **COORDINATOR**
Christopher Tedrick, **MERCHANDISING COORDINATOR**

RESEARCH
Renée Mitchell, **DIRECTOR**
Marilyn Resciniti, **MANAGER**
Katherine Madson, **RESEARCH ANALYST**

CONSUMER MARKETING
Scott I. Rockman, **VICE PRESIDENT**
Lisa Dunham, **CIRCULATION DIRECTOR**
Elizabeth M. Hopkins, **PLANNING DIRECTOR**
Andrea Sole, **FULFILLMENT DIRECTOR**
Donald G. Dodd, **FORECAST MANAGER**
Suzanne L. Eng, **PURCHASING MANAGER**
Rosemary S. McGuire, **RETENTION AND GIFT DIRECTOR**
Lori Paldino, **DIRECT MAIL MANAGER**
Nancy Timko, **GIFT MANAGER**
John O'Hare, **MEMBERSHIP SERVICES COORDINATOR**
Michele Palmieri, **ADMINISTRATIVE ASSISTANT**
Amity Boone, **RENEWALS MARKETING COORDINATOR**

PRODUCTION
Greg Williams, **DIRECTOR**
Katherine Balch, **PRODUCTION MANAGER**
Rachel L. Gilmore, **DIGITAL ADVERTISING COORDINATOR**
Sarah Kingsley, **DIRECTOR OF MANUFACTURING**
David Sterling, **PREPRESS MANAGER**
Rahsaan J. Jackson, **DIGITAL COLOR ANALYST**
Frank Matthew Hale II, **ASSISTANT PREPRESS MANAGER**

BUSINESS OFFICE
Myrian Mora, **EXECUTIVE ADMINISTRATOR**
Michael Pollock, **ADVERTISING SYSTEMS MANAGER**
Lawrence Sirna, **ACCOUNTS PAYABLE/GENERAL LEDGER MANAGER**
Jeff Campagna, **ACCOUNTING SPECIALIST**
Sadiqa Robinson, **BUSINESS ANALYST**

HUMAN RESOURCES
Dana S. Moreland, **DIRECTOR**
Teshia R. Williams, **HUMAN RESOURCES GENERALIST**
Eric J. Ruffin, **OFFICE MANAGER**
Judy Smith-Fowler, **MANAGEMENT ASSISTANT**
Leonidias Dicks, **SUPPORT SERVICES ASSISTANT**
Dennis I. Osorio, **SUPPORT SERVICES ASSISTANT**

WEB DEVELOPMENT
Michelle A. McMahon, **DIRECTOR**
Christine Hull, **WEB DEVELOPER**
Thea Joselow, **WEB DEVELOPER**

ASSISTANT TO THE PUBLISHER
Edward J. Hayes

MAIN ADVERTISING OFFICE:
420 Lexington Avenue, Suite 2335
New York, NY 10170
(212) 916-1300

Smithsonian Institution

SECRETARY OF THE SMITHSONIAN INSTITUTION

Lawrence M. Small

BOARD OF REGENTS

The Chief Justice of the United States, CHANCELLOR

Vice President of the United States, Richard B. Cheney

Hon. Thad Cochran
Hon. Bill Frist, M.D.
Hon. Patrick J. Leahy
Hon. Sam Johnson
Hon. Robert T. Matsui
Hon. Ralph Regula
Mr. Eli Broad
Ms. Anne d'Harnoncourt
Dr. Hanna H. Gray
Dr. Manuel L. Ibáñez
Dr. Walter E. Massey
Mr. Roger W. Sant
Mr. Alan G. Spoon
Ms. Patricia Q. Stonesifer
Mr. Wesley S. Williams, Jr.

SMITHSONIAN NATIONAL BOARD

Mrs. Patricia Frost, CHAIR
Mrs. Jane B. Eisner, Mrs. Elizabeth S. MacMillan, Mr. Henry R. Muñoz III, VICE CHAIRS

NATIONAL BOARD: Mrs. Claudia Ream Allen, Mr. Kenneth E. Behring, Mr. L. Hardwick Caldwell III, Mr. Richard O. Campbell, Mr. Paul L. Cejas, Mr. Pete Claussen, Mrs. Margaret Collins,* Mr. George A. Didden III, Mr. Robert G. Donnelley, Mr. Bradford M. Freeman, Mr. Stephen Hamblett, Mr. Frederic C. Hamilton, Mr. Michael R. Haverty, Mr. Richard W. Herbst, Mr. John E. Herzog, Ms. Irene Y. Hirano, Mr. Richard D. Kinder, Mrs. Dorothy G. Lemelson, Mr. Peter H. Lunder, Mr. Frank Martucci, Mr. Edgar M. Masinter, Ms. Amy Sarah McCombs, Mr. Chris E. McNeil, Jr., Mr. Augustus C. Miller, Mr. Howard P. Milstein, Mr. Charles H. Moore, Mrs. Susan Reed Moseley, Mrs. Mary Ourisman, Mr. Paul L. Peck, Mr. S. Davis Phillips, Mr. Thomas F. Pyle, Jr., Ms. Susan Lynch Ruddy, Mr. Richard T. Schlosberg III, Hon. Rodney E. Slater, Mrs. Helen Spaulding, Mrs. Beatrice R. Taylor

HONORARY MEMBERS: Mr. Robert McC. Adams, Mr. William S. Anderson, Hon. Max N. Berry, Mr. Richard P. Cooley, Mr. Joseph F. Cullman 3rd, Mr. Frank A. Daniels, Jr., Mr. Charles D. Dickey, Jr., Mr. Alfred C. Glassell, Jr., Mr. I. Michael Heyman, Mr. James M. Kemper, Jr., Mrs. Jean B. Mahoney, Hon. George C. McGhee, Justice Sandra D. O'Connor, Mr. Francis C. Rooney, Jr., Mr. Wilbur L. Ross, Jr., Mr. Lloyd G. Schermer, Hon. Frank A. Weil, Mrs. Gay F. Wray

* Ex-Officio

CHARLES PHILLIPS; JOHN EISENBERG

Turning 35

It all began with a brief, but fateful, conversation

BY CAREY WINFREY

HAPPY NEW YEAR to you and, if I may, Happy Anniversary to us. Thirty-five years ago SMITHSONIAN was preparing to debut, in April 1970, as a magazine dedicated to reflecting the interests, ideals and high standards of the Smithsonian Institution. To commemorate our jade anniversary, we plan to publish, later in the year, a special issue honoring 35 men and women who have made extraordinary contributions to the fields we cover most: history, nature and wildlife, science and the arts.

Thompson (above, in 1970): "And *should* be." An almost unlimited variety of subject matter was possible (left, Volume One, Number One).

We are also introducing, in this issue, a new department called "The Year We Were Born," a retrospective of that turbulent 1970—from the Chicago Seven and the invasion of Cambodia to "Bridge over Troubled Water" and "Do the Funky Chicken." TYWWB can be found on page 19.

SMITHSONIAN was founded by Ed Thompson, a former editor of *Life*, and S. Dillon Ripley, then secretary of the Smithsonian. A couple of titles they initially considered, and quickly dismissed, were *Smithson's Monthly*, after James Smithson, the Englishman who bequeathed the bulk of his fortune to create the Institution, though he had never even visited the United States, and *Diffusion*, after Smithson's instruction that the funds be used for "the increase and diffusion of knowledge."

In his 1995 memoir, *A Love Affair With Life & Smithsonian*, Thompson, who died in 1996 at age 89, described the meeting at Ripley's Connecticut farm at which the magazine was midwifed.

"I said that I didn't want to run a house organ," Thompson recalled. "He said he didn't want that either. After we had rambled over some possible subject matter, we agreed that the magazine's content could be about whatever the Institution was interested in—or might be interested in. I threw in, 'And *should* be?' He agreed. That was about all that was articulated as a working idea, but an almost unlimited variety of subject matter was possible under such a concept."

Four hundred eighteen issues later, that brief conversation in Connecticut, and the license it confers, still inspires us to seek out great stories and great photography wherever our instincts lead us. And at 35 years young, we feel we're just getting started.

Greater than four-wheel drive. Audi quattro.® For 25 years, quattro all-wheel drive has done more than help hold, stick and grip. It's led the way. It's greater to lead than follow.

"Audi," "quattro," "A6" and the four rings emblem are registered trademarks of AUDI AG. "Never Follow" is a registered trademark of Audi of America, Inc. ©2004 Audi of America, Inc.

4

Never Follow audiusa.com/A6

Tiny Treasures

From mosquitoes to mementos, the smallest items in the Smithsonian's collections can be the most useful

GREAT THINGS come in small packages. What's true of gifts we give and receive is also true of the Smithsonian's vast collections. Some of the smallest, easiest-to-overlook objects—an insect, say, or a button issued during a presidential campaign—are important for scientists and historians, and for all of us.

As of 2003, the Institution's museums held 143.7 million items, the great majority of which were insects, fossils and invertebrate animals currently housed at the National Museum of Natural History (NMNH). In fact, NMNH accounts for 88 percent of the Institution's holdings. And of the more than 145,000 new items that all the museums acquired in 2004, NMNH accounted for some 125,000. Many of these are tiny organisms, but the research they make possible holds enormous value.

Today, research entomologists with the Walter Reed Army Institute of Research work side by side with NMNH specialists to understand how particular species of mosquitoes carry and transmit diseases like malaria and West Nile virus. Their work is made possible by NMNH's collection of 1.5 million mosquitoes—the world's largest. Over the years, the reasons that Smithsonian scientists collected mosquitoes have changed, and so has the nature of the research that their collection supported. But the scientific worth of the collections—the importance of having well-preserved specimens of as many unique species as possible—has only increased. The Smithsonian's collection of mosquitoes began in the late 1800s, thanks to scientists at the Department of Agriculture who gathered adults and larvae in the field. That early research focused not so much on the diseases that some species carry but on taxonomy, the labor-intensive and often unheralded work of describing and classifying newly discovered organisms.

In the early 1960s, civilian and military scientists became more interested in mosquito-borne diseases, principally because of the country's escalating involvement in Vietnam. Today scientists still collect mosquito specimens in the field, but they also raise them in laboratories, making sure that for each species collected they have examples of all of its developmental stages from larva to pupa to adult. That painstaking thoroughness has proved especially useful to researchers working to understand the complex story of how West Nile virus is transmitted from birds to mosquitoes to human beings.

No less than its collection of mosquitoes, the Institution's collection of election ephemera reveals a complex story as well. The National Museum of American History (NMAH) owns more than 90,000 election-related items, from badges and ribbons to the hand-lettered signs, sometimes homemade and sometimes made to look homemade, that delegates and attendees raise in support of their favorite candidate. The collection boasts artifacts from the most recent election as well as commemorative buttons issued to celebrate George Washington's inauguration, one of which reads: "Long live the president." Unlike more contemporary buttons, to be pinned to lapels, shirt pockets or book bags, these Washington buttons have shanks on their backs, so that they might have been sewn onto a coat and used as real buttons.

Election ephemera (a George Washington inauguration button) reveals complexities.

By studying a diverse array of campaign buttons and the like, historians grasp trends and patterns, understanding how political expression has evolved, as well as how it has remained surprisingly consistent. In 1840, for example, William Henry Harrison's campaign portrayed the well-born candidate as a man of humble origins, associating his name with the image of a log cabin. Later politicians followed Harrison's lead, in both their campaign material and their rhetoric. Today, log cabins appear throughout the Smithsonian's collection, on everything from hairbrushes to decorative ribbons for special occasions. One of the great joys of building up such incomparable collections is the knowledge that long after the items have been acquired and cataloged, scholars and Smithsonian visitors alike will find meaning in them anew.

Lawrence M. Small
SECRETARY OF THE SMITHSONIAN INSTITUTION

JEFF TINSLEY / OIPPS, SI; RALPH E. BECKER COLLECTION OF POLITICAL AMERICANA, NATIONAL MUSEUM OF AMERICAN HISTORY - BEHRING CENTER, SMITHSONIAN INSTITUTION

With the military since 1941.
This and other stories at mms.com/history

m

Chocolate is Better in Color™

Readers respond to the November issue:

LONELY LUNA

THE DELIGHTFUL "Whale of a Tale," about Luna, the lone orca in British Columbia's Nootka Sound, ended on a distressing note. Luna now has the worst of both worlds. He has no orca family and has been essentially shunned by his human companions. We are given no reason to believe that he will not become increasingly lonely, frustrated and obstreperous, and potentially do harm to himself or to people. How can this possibly be the best course of action for Luna? I sincerely hope that the Canadian department of fisheries and oceans (DFO) and the Mowachaht/Muchalaht First Nation will rethink their actions. Surely there must be a better alternative!

RITA CATCHING
AMBOY, WASHINGTON

MIKE MAQUINNA and his tribe are so set on Luna's freedom that they do not seem to realize that by keeping the whale in Nootka Sound, where he cannot hear or find others of his kind, they have turned him into a carnival sideshow. And if Luna is Maquinna's deceased father incarnate, chasing after boats and performing tricks for human affection cannot possibly be the orca life he was hoping for. Luna belongs with his pod in the open sea.

JOHN D. VAN DYKE
SAN MATEO, CALIFORNIA

CALL ME SIMPLISTIC, but couldn't the agreement between the DFO and the Mowachaht/Muchalaht Native people, instead of ignoring Luna completely, be amended to allow Luna all the human contact he wants—with the tribe? It's obvious that this orca has chosen human beings as his new pod, and to deny him the slightest contact is inhumane. No wonder Luna's gotten aggressive. I would too, if you showered me with attention and then took it all away.

CAROLE WHITE
SHAWNEE, KANSAS

IN MEMORIAM: Indah, the 24-year-old female orangutan whose move from the Smithsonian's National Zoo to the Great Ape Trust near Des Moines was reported in our December issue, died on November 11. Veterinarians euthanized Indah after her lifelong intestinal syndrome had worsened and become untreatable. "She will be sorely missed," said Sue Savage-Rumbaugh of the Great Ape Trust.

WHAT'S IN A NAME?

I FOUND IT appalling that, when we are engaged in a "war" that has questionable motives, the Smithsonian chose to name an exhibit on American wars "The Price of Freedom." Reading the list of wars represented ("Around the Mall"), I see a number that were territorial or expansionist conflicts. Those that did have to do with safeguarding freedom and democracy stand out and should be celebrated. Honoring our soldiers with an exhibition about American war experiences and their profound effects on both individuals and society is a worthwhile endeavor. The title, however, cheapens the effort.

JULIE LEONARD
IOWA CITY, IOWA

THE DOCUMENT from Saddam's reign is not a certificate of membership in the Iraqi Ba'ath Party, as stated in "Not Legal Tender," but a certificate for volunteers participating in the liberation of Palestine. It was issued by the Ba'ath Party and identifies the holder as having answered Saddam's call to liberate Palestine. Saddam's promotion of such incitement and his payments to families of Palestinian suicide bombers are instances of the instability the former Iraqi despot brought to the region.

LT. CMDR. YOUSSEF ABOUL-ENEIN
MIDDLE EAST FOREIGN AREA OFFICER, U.S. NAVY
GAITHERSBURG, MARYLAND

CASTING STONES

RICHARD COVINGTON'S "Mighty Macedonian" offered a straightforward history of Alexander the Great, in contrast to Oliver Stone's new film, which apparently implies that Alexander was sexually attracted to his mother, killed his father and was murdered by his own generals—none of which is historical fact. Stone describes himself as a "dramatist," but his movie will be received by many as pure history. Because learning from history helps us avoid repeating past mistakes, humanity would be better served by more Covingtons and fewer Stones.

M. D. ANICH
OMAHA, NEBRASKA

Please send letters to LettersEd@simag.si.edu or to **Letters, Smithsonian, MRC 951, P.O. Box 37012, Washington, D.C. 20013.** Include a telephone number and address. Letters may be edited for clarity or space. Because of the high volume of mail we receive, we cannot respond to all letters. Send queries about the Smithsonian Institution to info@si.edu or to VIARC, Public Inquiry Mail Service, P.O. Box 37012, Washington, D.C. 20013.

SMITHSONIAN (NOVEMBER 2004) (2); JOCELYN AUGUSTINO

What tobacco issue is important to you?

The Serious Health Effects of Smoking

Youth Smoking Prevention

Quitting Smoking

Responsible Marketing

At philipmorrisusa.com you can find resources and information on many tobacco-related issues like these–including downloadable brochures with advice from experts on talking to kids about not smoking and tips on starting the conversation. You'll also find details on how we're partnering with retailers to help prevent kids from getting access to cigarettes. To find out more, visit us online or call 1-877-PMUSA-WEB.

philipmorrisusa.com

1-877-PMUSA-WEB

© Philip Morris USA 2004

He's not the only one dominating the finish line.

It's those distinctive white Canon lenses. In fact, look at the sidelines of just about every major sporting event in the world, and you'll see those white lenses almost exclusively. Because Canon cameras and lenses are the equipment of choice for 90% of *Sports Illustrated* staff photographers and the majority of the top newspapers in the country.

Why? Because, just like on the track, you have to be more than just fast. You need durability, quality and superior technology. And the same technology that makes Canon cameras and lenses virtually an industry standard goes into every piece of equipment Canon makes. So when you're choosing a system, remember, nobody can beat Canon's track record.

Canon KNOW HOW®

digital REVOLUTIONIZED photography ■ we REVOLUTIONIZED digital™

© 2004 Canon U.S.A., Inc. Canon and Canon Know How are registered trademarks and digital REVOLUTIONIZED photography ■ we REVOLUTIONIZED digital are trademarks of Canon Inc. in the United States and may also be registered trademarks or trademarks in other countries. Visit us at www.canoneos.com or call 1-800-OK-CANON. Photo: Smiley Pool/*Dallas Morning News*. Taken with: Canon EOS-1D Mark II + EF 400, f2.8 IS lens with 1.4 tele-extender. ISO: 800, shutter: 1/500, aperture: 4.0. *Sports Illustrated* is a registered trademark of Time Inc. Used with permission.

January 1970

THE YEAR WE WERE BORN

A LOOK BACK AT THE WORLD IN SMITHSONIAN MAGAZINE'S FIRST YEAR

WHERE ARE THEY NOW?

Standing, from left: Abbie Hoffman, John Froines, Lee Weiner, David Dellinger, Rennie Davis, Tom Hayden. Seated: Jerry Rubin and girlfriend Nancy Kurshan.

RENNIE DAVIS

MEMBER OF THE CHICAGO SEVEN

ON JANUARY 26, Rennie Davis takes the stand as one of the Chicago Seven, a group of activists charged with conspiring to incite riots at the 1968 Democratic Convention, and calls Judge Julius J. Hoffman a stooge of Mayor Richard Daley, earning yet another sharp rebuke from the crusty jurist.

Today a venture capitalist in Colorado, Davis vividly remembers poet Allen Ginsberg's testimony for the defense. Asked how he might "keep the peace" at a protest, Ginsberg chanted "Ohmmm." Says Davis: "The jury was wide-eyed; the judge just sat there."

Acquitted on appeal, the Chicago Seven went their separate ways. Abbie Hoffman killed himself in 1989, and Jerry Rubin died in 1994. David Dellinger, the oldest of the group, died last year at age 88. Former California state senator Tom Hayden teaches at Occidental College. John Froines runs UCLA's Center for Occupational and Environmental Health. Lee Weiner is a consultant to nonprofit groups.

"With age, the body will be covered completely. If the body can no longer be accentuated it should be abstracted. For youth, a time for physical display."

—FASHION DESIGNER RUDI GERNREICH, JANUARY 20

IN THE NEWS

On January 22, Pan Am's *Young America* leaves New York City for London carrying 332 passengers—the first commercial trip for a "jumbo jet." More than 1,000 fly today.

Biafra's 32-month struggle to secede from Nigeria, which results in nearly two million deaths from war or starvation, ends in surrender January 13.

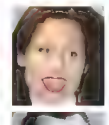
Muammar al-Qaddafi, a 27-year-old colonel, becomes Libya's prime minister January 16, after leading a bloodless military coup in Tripoli four and a half months earlier.

THE LIST

Top-grossing films of 1970

1. Airport 2. M*A*S*H 3. Patton 4. Bob and Carol and Ted and Alice 5. Woodstock 6. Hello, Dolly! 7. Cactus Flower 8. Catch-22 9. On Her Majesty's Secret Service 10. The Reivers

COMINGS & GOINGS



BORN: Minnie Driver, actress, January 31

DIED: Pavel Belyayev, cosmonaut, January 10

"Surely, a woman in the White House is not an impossible feminist cause. It's only a small step in the humanist revolution." **—GLORIA STEINEM** IN *LOOK*, JANUARY 13

AP / WIDE WORLD PHOTO; RENNIE DAVIS; CORBIS; CORBIS; BOEING CORPORATION; KURT STRUMPF / AP / WIDE WORLD PHOTOS; CORBIS (2); AP / WIDE WORLD PHOTOS

ALL HYBRIDS ARE NOT CREATED EQUAL.

HYBRID

Unlike the competition's mild hybrids, which always require power from the gasoline engine, full hybrids – like the new Ford Escape Hybrid – have the ability to drive in electric-only mode at certain speeds. That means fewer trips to the gas station. 61% fewer smog-forming pollutants. 80% better fuel economy.* In fact, this SUV is the most fuel-efficient SUV out there. No, all hybrids are not created equal. On the road to a better future, some are born to lead the way. Fordvehicles.com/escapehybrid.

Ford

ESCAPE HYBRID

Earth's First Full Hybrid SUV.

*Improved fuel economy and emissions data compared to Escape gasoline engine. Escape Hybrid EPA estimated 36 city/31 hwy mpg, front-wheel drive. Your actual mileage will vary depending on your driving habits.

A hero's welcome: Lorrie, Robert Jr., Cindy, Loretta and Roger Stirm greet Lt. Col. Robert Stirm after his six years as a prisoner of war.

SLAVA VEDER / AP / WIDE WORLD PHOTOS; RICHARD PEDRONCELLI / AP / WIDE WORLD PHOTOS

Coming Home

To a war-weary nation, a U.S. POW's return from captivity in Vietnam in 1973 looked like the happiest of reunions ~ BY CAROLYN KLEINER BUTLER

SITTING IN THE BACK SEAT of a station wagon on the tarmac at Travis Air Force Base, in California, clad in her favorite fuchsia miniskirt, 15-year-old Lorrie Stirm felt that she was in a dream. It was March 17, 1973, and it had been six long years since she had last seen her father, Lt. Col. Robert L. Stirm, an Air Force fighter pilot who was shot down over Hanoi in 1967 and had been missing or imprisoned ever since. She simply couldn't believe they were about to be reunited. The teenager waited while her father stood in front of a jubilant crowd and made a brief speech on behalf of himself and other POW's who had arrived from Vietnam as part of "Operation Homecoming."

The minutes crept by like hours, she recalls, and then, all at once, the car door opened. "I just wanted to get to Dad as fast as I could," Lorrie says. She tore down the runway toward him with open arms, her spirits—and feet—flying. Her mother, Loretta, and three younger siblings—Robert Jr.,

"So much had happened. There was so much that my dad had missed out on. It took a while to let him back into our lives."

Roger and Cindy—were only steps behind. "We didn't know if he would ever come home," Lorrie says. "That moment was all our prayers answered, all our wishes come true."

Associated Press photographer Slava "Sal" Veder, who'd been standing in a crowded bullpen with dozens of other journalists, noticed the sprinting family and started taking pictures. "You could feel the energy and the raw emotion in the air," says Veder, then 46, who had spent much of the Vietnam era covering antiwar demonstrations in San Francisco and Berkeley. The day was overcast, meaning no shadows and near-perfect light. He rushed to a makeshift darkroom in a ladies' bathroom on the base (United Press International had commandeered the men's). In less than half an hour, Veder and his AP colleague Walt Zeboski had developed six remarkable images of that singular moment. Veder's pick, which he instantly titled *Burst of Joy*, was sent out over the news-service wires, published in newspapers around the nation and went on to win a Pulitzer Prize in 1974.

"We've learned not to take anything for granted," says Lorrie (with her father last year). "I'm one of the lucky ones."

It remains the quintessential homecoming photograph of the time. Stirm, 39, who had endured gunshot wounds, torture, illness, starvation and despair in North Vietnamese prison camps, including the infamous Hanoi Hilton, is pictured in a crisp new uniform. Because his back is to the camera, as Veder points out, the officer seems anonymous, an everyman who represented not only the hundreds of POW's released that spring but all the troops in Vietnam who would return home to the mothers, fathers, wives, daughters and sons they'd left behind. "It's a hero's welcome for guys who weren't always seen or treated as heroes," says Donald Goldstein, a retired Air Force lieutenant colonel and a coauthor of *The Vietnam War: The Stories and The Photographs*, of the Stirm family reunion picture. "After years of fighting a war we couldn't win, a war that tore us apart, it was finally over, and the country could start healing."

Sal Veder, 2004.

But there was more to the story than was captured on film. Three days before Stirm landed at Travis, a chaplain had handed him a Dear John letter from his wife. "I can't help but feel ambivalent about it," Stirm says today of the photograph. "I was very pleased to see my children—I loved them all and still do, and I know they had a difficult time—but there was a lot to deal with." Lorrie says, "So much had happened—there was so much that my dad missed out on—and it took a while to let him back into our lives and accept his authority." Her parents were divorced within a year of his return. Her mother remarried in 1974 and lives in Texas with her husband. Robert retired from the Air Force as a colonel in 1977 and worked as a corporate pilot and businessman. He married and was divorced again. Now 72 and retired, he lives in Foster City, California.

As for the rest of the family, Robert Jr. is a dentist in Walnut Creek, California; he and his wife have four children, the oldest of whom is a marine. Roger, a major in the Air Force, lives outside Seattle. Cindy Pierson, a waitress, resides in Walnut Creek with her husband and has a daughter in college. And Lorrie Stirm Kitching, now 47, is an executive administrator and mother of two sons. She lives in Mountain View, California, with her husband. All four of Robert Stirm Sr.'s children have a copy of *Burst of Joy* hanging in a place of honor on their walls. But he says he can't bring himself to display the picture.

Three decades after the Stirm reunion, the scene, having appeared in countless books, anthologies and exhibitions, remains part of the nation's collective consciousness, often serving as an uplifting postscript to Vietnam. That the moment was considerably more fraught than we first assumed makes it all the more poignant and reminds us that not all war casualties occur on the battlefield.

"We have this very nice picture of a very happy moment," Lorrie says, "but every time I look at it, I remember the families that weren't reunited, and the ones that aren't being reunited today—many, many families—and I think, I'm one of the lucky ones."

CAROLYN KLEINER BUTLER is a contributing editor for U.S. News & World Report. *She lives in Cumberland Island, Georgia.*

MARK RICHARDS

The very first taste of a truly

Nothing announces the beginning of a pleasurable dining experience like the gleam of Bvlgari® china and Riedel® stemware on fine Frette® linens. A delectable meal should be celebrated. And you'll find that it is—in our intimate Pinnacle Grill, two-tiered dining room, casual Lido Restaurant and everywhere else you dine on a Holland America ship. *Call your travel agent or 1-877-SAIL HAL, or visit www.hollandamerica.com.*

Spacious, Elegant Ships • Gracious, Unobtrusive Service • Worldwide Itineraries

All third-party listed trademarks are owned by their respective entities. Ships' Registry: Netherlands, Bahamas.

HAWAII • MEXICO • PANAMA CANAL • SOUTH AMERICA • WORLD VOYAGE

memorable meal is taken with the eyes.

Holland America Line

A Tradition of Excellence

EXTENSIVE ACTIVITIES AND ENRICHMENT PROGRAMS • SOPHISTICATED FIVE-STAR DINING

Ahead of Its Time?

Founded by a freed slave, an Illinois town was a rare example of biracial cooperation before the Civil War ~ BY DANA MACKENZIE

IN RURAL PIKE COUNTY, Illinois, a solitary highway marker surrounded by mown grass, potted flowers and a small American flag stands by a little-traveled road. "SITE OF NEW PHILADELPHIA," it reads. Beyond the marker stretch cornfields, trees and gentle hills as far as the eye can see. The vista hasn't changed much since "Free Frank" McWorter, a former slave, moved his family here in 1831 and later started the town, the first in America legally founded by a black person.

McWorter dreamed big. New Philadelphia's Main Street and Broadway were some 80 feet wide—broader than many streets in New York City then. By 1865, the village, likely named for the most active urban center for free blacks at the time, had become a minor commercial hub with 104 white and 56 black inhabitants. Rare in frontier America, blacks and whites went to school together and even intermarried.

The excavation of a town founded by a freed slave may illuminate 1800s race relations (left, a c. 1925 class from the New Philadelphia schoolhouse).

Today, New Philadelphia isn't even a ghost town. The original buildings have long since been plowed under, and Broadway and Main Street are part of a gravel driveway that leads to a farmhouse. But the western Illinois town is coming back to life. Archaeologists and college students from around the country embarked this past summer on a planned three-year study, combing fields for remnants of the vanished community. "Archaeologists who study African-American history have spent most of their time excavating slave quarters," says Paul Shackel, an anthropologist at the University of Maryland, who is leading the study. "By excavating a free community in which blacks lived before the Civil War, we are breaking into a new genre."

McWorter had been a slave in Kentucky before he bought his freedom in 1819 at age 42 by manufacturing and selling saltpeter. He purchased New Philadelphia from the federal government with profits from farming. It was an investment in his family's freedom. Over the course of 40 years, he earned enough from farming and selling land to buy 16 family members out of slavery for a total of $14,000 (more than a quarter of a million dollars in today's currency). Some of his neighbors, such as farmer and fellow property owner John Walker, were also former slaves who purchased their freedom. Others, particularly after the Civil War, had fewer means: William Butler, freed by Abraham Lincoln's Emancipation Proclamation, arrived in New Philadelphia with nothing but a mule, was given a job by McWorter's son Solomon and, eventually, was able to buy land on the north side of town.

Archaeologists are filling in missing details of how and where the settlers lived. This past May, Michael Hargrave of the U.S. Army Corps of Engineers surveyed part of the 42-acre town site with a device that uses ground-penetrating electrical and magnetic fields to detect buried objects. From the radar-like images, archaeologists pinpointed 19 promising places to dig, including what was most likely a cellar or a garbage pit in the Butler home.

STAN FELLOWS; PIKE COUNTY HISTORICAL SOCIETY

EST. 1853

GEVALIA®
KAFFE

Much to savor. Nothing to join.

Delight in the exquisite taste of Gevalia Kaffe and you'll receive a FREE Programmable Thermal Carafe Coffeemaker. There's no commitment and your satisfaction is unconditionally guaranteed.

Your first sip will tell you that Gevalia is a coffee unlike any you've ever tasted. In a word, extraordinary. We invite you to sample your favorite four for just $19.95, and brew them to perfection in your FREE Programmable Thermal Coffeemaker. This remarkable machine helps keep coffee fresh for hours and the thermal carafe comes right to the table for easy entertaining.

No obligation to join anything • You may cancel at any time • No minimum purchase required
FREE Programmable Thermal Coffeemaker, approximate retail value $99, just for trying Gevalia

SATISFACTION GUARANTEED or you may return your coffee for a complete refund and keep the coffeemaker. Gevalia Kaffe reserves the right to substitute an item of equal value.

RESERVED DELIVERIES. If you enjoy Gevalia, you will automatically receive four half-pounds of your selected coffee(s) approximately one month later. Subsequent deliveries will arrive once every six weeks. You may change the frequency, quantities or types of your coffees or cancel anytime by calling 1•800•GEVALIA. Each year you will also receive a holiday delivery. You will be notified in advance with details of this special package and its seasonal price; you may cancel any delivery you do not wish to receive.

CONVENIENT BILLING. Prices of coffees vary from $5.55–$7.45 plus shipping and handling. You may pay upon receipt of each delivery or, for those using credit cards, subsequent deliveries will be billed to your card. Coffee prices are subject to change.

NO COMMITMENT. If you must return a delivery, you may do so at our expense.

Offer is subject to change and is open to residents of the U.S., the U.S. Virgin Islands and Puerto Rico. Limit one Gevalia Kaffe membership per household. Offer only valid for new members. Offer expires one year from publication issue date.
GEVALIA is a registered trademark.

You are invited to try four half-pound packages of Gevalia Kaffe for $19.95, including shipping and handling, and receive a FREE Programmable Thermal Carafe Coffeemaker in your color choice of white or black. There's no minimum purchase required. If you enjoy Gevalia, you will receive more automatically about every six weeks (or on a schedule you request), plus a special holiday delivery. You may cancel this arrangement at any time after receiving your Trial Delivery. The coffeemaker is yours to keep with no further obligation.

CODE: 107437

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

E-mail _____ ☐ Please check here if you do not wish to receive special offers and news from Gevalia via e-mail.

Choose your coffeemaker color:

☐ Black ■ (BL) ☐ White ☐ (WH)

Charge my: ☐ MasterCard ☐ Visa ☐ American Express ☐ Discover

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Card Number

☐☐☐☐ Exp. Date (MM/YY)

Signature Required _____

☐ Enclosed is my check payable to **Gevalia Kaffe** for $19.95.

CHOOSE THE FOUR THAT DELIGHT YOU MOST

☐ Signature Blend	KL
☐ Breakfast Blend	KN
☐ French Roast*	KP
☐ Traditional Roast®	C
☐ Colombia	F
☐ Mocca Java	I
☐ Hazelnut**	Q
☐ French Vanilla**	O
☐ Mocha**	L
☐ Irish Creme**	P

*Whole bean available in 7-oz. packages only.
**Not available in whole bean.

Choose one from each column:

☐ Regular (R) ☐ Decaf. (D) | ☐ Whole Bean (1) ☐ Ground (2)

Gevalia Kaffe offers a tempting array of over 40 coffees and teas.

Complete and mail to: GEVALIA KAFFE, P.O. Box 5276, Clifton, NJ 07015-5276

Call **1•800•GEVALIA** (1-800-438-2542) toll free, 24 hours, 7 days
You can also order at **www.gevalia.com**

Some newspapers cast New Philadelphia as an oasis of racial tolerance, but a descendant of the town's founder disagrees.

Twelve students spent five weeks in the field excavating 19 shallow 5-foot by 5-foot exploratory pits in recently plowed (but unplanted) fields covered by high grass. They ate lunches donated by merchants in nearby Barry, Illinois, and stayed in steeply discounted rooms at a nearby hunting lodge. "I've told them that archaeologists never have it so good," says Shackel, a genial, well-tanned 45-year-old who has worked for the National Park Service at Harpers Ferry, West Virginia, and other sites.

Shackel and his team spent another five weeks cataloging their finds, at the Illinois State Museum in Springfield. Every item had to be cleaned, placed in a plastic bag and entered into logbooks. If it was a piece of a bottle, the students would note the kind of glass; if it was a bone, they would figure out the animal it came from and the body part. If it was a piece of ceramic, they licked it. "If it sticks to your tongue, it's earthenware," explains Charlotte King, a research associate at the University of Maryland who supervised the cataloging. "Earthenware is fired at a lower rate, and so it's very porous. Stoneware is less porous, and porcelain is the least porous because it's fired at a very high temperature."

Nothing dug up so far (Illinois State Museum curator Terrance Martin and students) has changed history's view of relations between blacks and whites in the town.

Among the 3,000 artifacts the team unearthed were shards of glass, pieces of brick, buttons, clay marbles and a dizzying variety of bones—most of them from the Butler residence. A small badge inscribed "Illinois State Fair 1903" probably comes from a long-ago prize ribbon, says King. A fragment of green glass matches a type of bottle manufactured between 1855 and 1873, probably in Louisville—which may establish a date of occupation and a possible travel route. One piece of property, just off Broadway, is recorded as "unimproved" on 1867 tax records, but tests of 40 ceramic fragments suggest that someone lived there before 1860.

So far, the materials dug up by Shackel and co-workers haven't shed any new light on the town's race relations. But documents from McWorter's time show there was plenty of prejudice in this corner of Illinois. In 1871 former Pike County resident John Hay (Abraham Lincoln's personal secretary) wrote a series of poems called the *Pike County Ballads*. One tells the story of "Banty Tim," who is about to be run out of town by "The White Man's Committee of Spunky Point." The poem's narrator, Sgt. Tilmon Joy, saves the day by recounting how Banty Tim saved his life at Vicksburg, and continues: "Ef one of you tetches the boy, / He kin check his trunks to a warmer clime / Than he'll find in Illanoy."

Another kind of white man's committee may in fact have doomed New Philadelphia. In 1869, the Hannibal and Naples Railroad, which was planned and paid for by white businessmen, bypassed the town. The railroad connects nearby New Salem and Barry, and a straight line would have taken the train right by New Philadelphia, but instead the track makes an inexplicable bend to the north. There's no documentary evidence that the railroad deliberately avoided New Philadelphia, but by 1872 the detour had "greatly ruined its trade," the *Atlas Map of Pike County* reported, and in 1885 most of the town legally reverted to farmland. A few families remained well into the 20th century. In 1936, the New Philadelphia schoolhouse finally closed its doors.

Some newspaper reports about the dig have played up the idea of the town as an oasis of racial tolerance. But a descendant of the town's founder disputes that view. The "premise that New Philadelphia was a town where blacks and whites lived in racial harmony . . . is just not historic reality, any more than to claim that slaves lived happily on plantations," argues Juliet Walker, a great-great-granddaughter of McWorter and a historian at the University of Texas at Austin.

Shackel denies any attempt to idealize the past. "While the archaeology will probably not be able to show harmony or disharmony, it can illustrate the way of life for groups of people living in a biracial community," he says. "Archaeology is a way to provide a story of a people who have not been traditionally recorded in history. Our goal is to tell the story of New Philadelphia from the bottom up and provide an inclusive story of the town."

Despite their disagreements, both Walker and Shackel would like to see New Philadelphia commemorated by more than a roadside plaque. Walker envisions rebuilding the town. Shackel, who has the support of the New Philadelphia Association, a local citizens' group, hopes to turn the site into a state or national park. "There's probably 20 years of archaeology to explore and interpret," Shackel says. "We're in the first mile of a marathon."

DANA MACKENZIE is a freelance science writer based in Santa Cruz, California. This is his first article for SMITHSONIAN.

SHANNON GUTHRIE / *STATE JOURNAL-REGISTER*

We found our best watch in a history book

In 1922, a small watchmaker in Switzerland designed the first automatic watch to display the day, month and date. Only 7 of these magnificent timepieces were ever made and this watch was almost lost to history. Today, they are so rare that our watch historians are willing to bid $300,000 for an original in mint condition.

These watches were among the most stylish of the roaring 20's. The Stauer watch design that you see here has the antique color, the vintage style and the innovative functions of the original that we have seen in a Swiss museum. Even the Breguet™ style hands are designed from the original. The owner of this legendary multi-functional watch is sure to look distinguished and set apart from the crowd. This Stauer watch is a limited edition, allowing you to wear a watch far more exclusive than many luxury brands.

The watch has a 24-jewel mechanical movement, the kind desired by fine antique watch collectors. We have updated this movement with an automatic rotor thus the watch never needs to be manually wound. The watch comes in a beautiful crocodile embossed case with a free second band.

This is a chance to claim a piece of watchmaking history in an elegant design that is still priced to wear every day. This offer is being made directly to you so you can add this watch to your collection at a very affordable price. The watch comes with a 30-day no questions asked money-back guarantee. If you're not completely satisfied, simply return it for a full refund of the purchase price.

Now available for the first time at $99

Not Available in Stores

Call now to take advantage of this limited offer.

Stauer 1922 ~~$129~~

3 Payments of $33+S&H

800-859-6584

Promotional Code SNN607-10

Please mention this when you call.

To order by mail, please call for details.

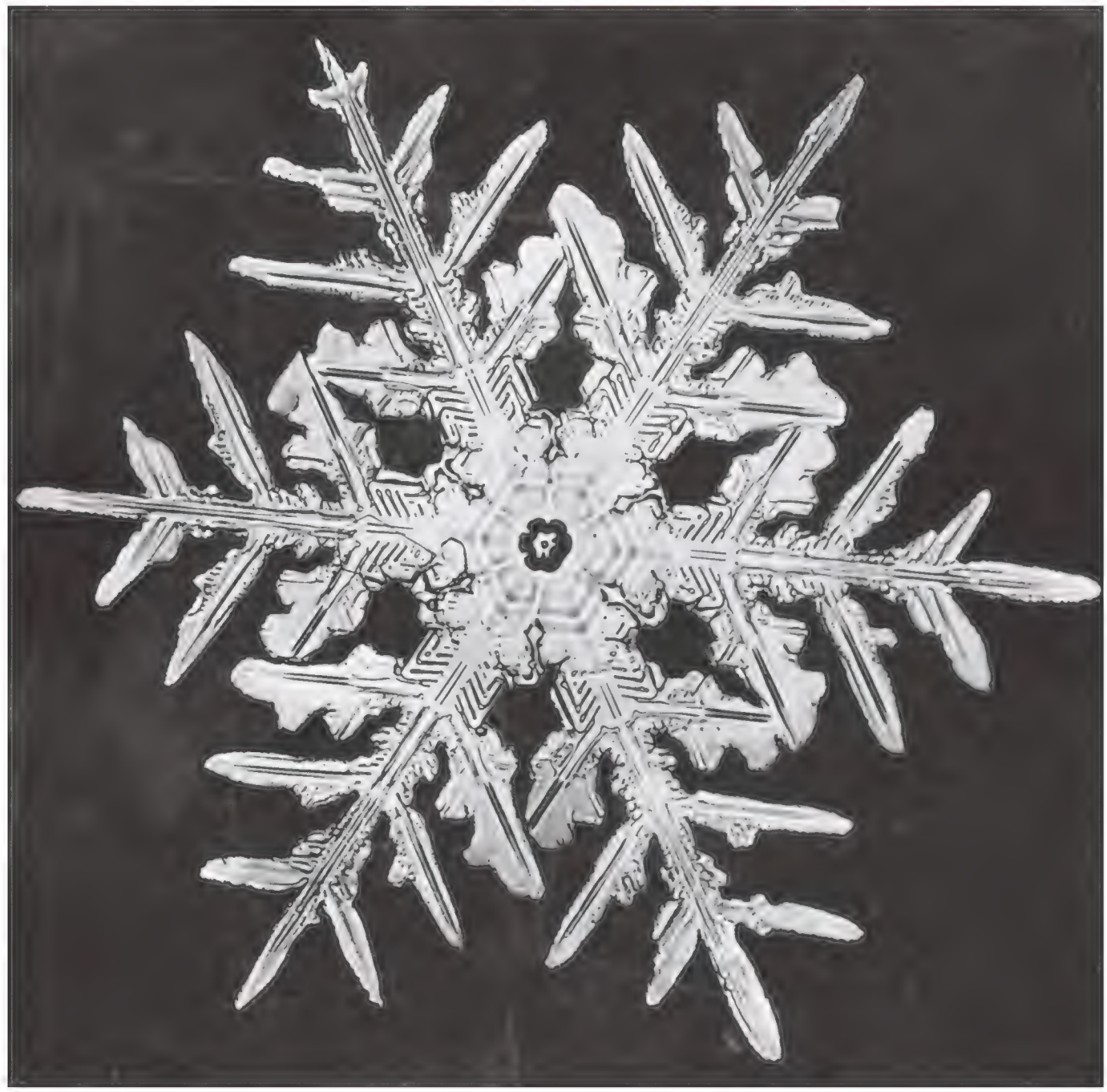
NEXTTEN

products for your next ten years.

14101 Southcross Drive W., Dept. SNN607-10
Burnsville, Minnesota 55337

For fastest service, call toll-free 24 hours a day **800-859-6584**

Learn more about the history of this 1922 classic at www.Nextten.com



[*Snow Crystal Photomicrograph, c. 1890*
SMITHSONIAN INSTITUTION ARCHIVES]

Freeze Frame

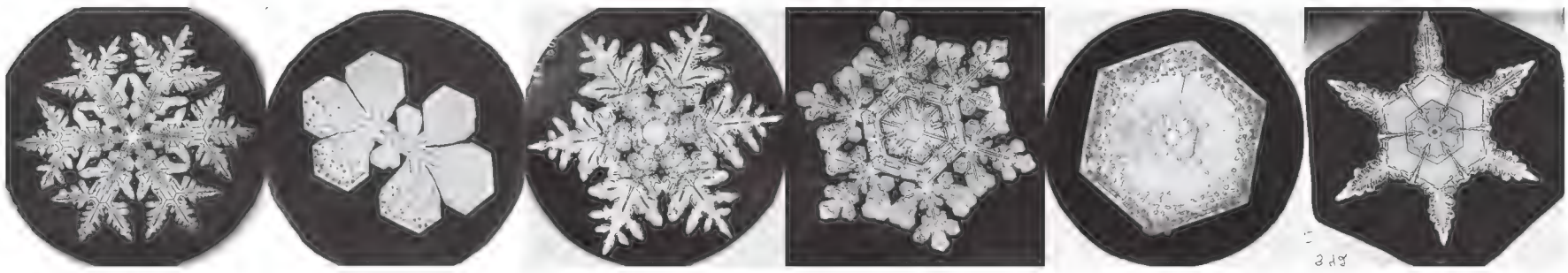
Beginning in the 1880s, amateur photographer Wilson A. Bentley revealed the hidden structure of falling flakes ~ BY OWEN EDWARDS

AT THIS TIME OF YEAR, children across the northern latitudes are learning an astonishing fact they will remember all their lives. They will pass it on to their children, who will pass it on to their children, on and on as long as there are sleds and skates and drifts and fine freezing days when schools close due to weather. This numinous fact, as basic to childhood as George Washington's cherry tree confession (and far more reliable), is that no two snowflakes are exactly alike.

Think of yourself as a 4- or 5-year-old, hurtling through the pointillist magic of a snowstorm, your tongue out to catch as many falling flakes as you can, hearing that these countless bits of frozen fluff have secret lives, that they are all

SMITHSONIAN INSTITUTION ARCHIVES

Alongside Copernicus and Curie, let us add the name Bentley.



different, never repeated, despite the clear evidence before your eyes that they are identical and undistinguishable. Someone, perhaps your kindergarten teacher, may have opened a book of photographs of the unreplicated beauty hidden in every flurry.

Almost as incredible, it will turn out, is that one individual is responsible for this wondrous revelation, a man as deserving of a place in that pantheon of those who have revealed something we never knew before as Copernicus, Newton and Curie. Let us add his name to the list: Wilson A. Bentley.

Three years ago, according to Smithsonian archivist Ellen Alers, a colleague, Tammy Peters, came upon a storage box with a label that could serve as the title of a Borges short story: "Memoranda on the New Egg Blower, and Miscellaneous Instruments (accession T90030)." As Alers recalls, "the box seemed to weigh about 75 tons." Inside were indeed egg-blowing tools; several metal photogravure plates depicting scenes from the Harriman-Alaska Expedition of 1899; engraving plates for an 1851 publication on American natural history; and hundreds of glass-plate negatives. Held up to the light, the images revealed rows of sharply etched six-pointed crystals, each unique. "We had no idea where they'd come from," Alers says.

A year or so later, Smithsonian archivist Mike Horsely came across a sheaf of photographic prints depicting snowflakes and marked "W. Bentley." Horsely remembered the glass plates. Negatives and positives were reunited. Wilson Bentley, the archivists discovered, had been a fascinating character.

Were it not for Bentley's tinkering with cameras during the early days of the medium, he might have lived an entirely unremarkable life. Born in 1865, he spent most of his 66 years as a farmer in Jericho, Vermont. Largely self-educated, he was one of those particularly American autodidacts whose natural inquisitiveness, mixed with a touch of eccentricity, led him on an intriguing quest.

Vermont farmers struggle against short growing seasons and long, deep winters. Beginning in the early 1880s, Bentley made use of what might have been fallow days by devising a mechanism that combined a microscope with a view camera. Using light-sensitive glass plates not unlike those that had recorded Civil War battlefields, he learned how to make extraordinarily sophisticated "portraits" of individual snow crystals.

Bentley (c. 1925) found "each snowflake is as different from its fellows as human beings are from each other."

As Eadweard Muybridge had used the camera to elucidate the previously misunderstood mechanics of a galloping horse, Bentley captured the likenesses of tiny objects both fragile and evanescent. Isolating individual crystals itself posed a daunting challenge—there may be 200 of them in a large snowflake. And keeping the crystals frozen and unspoiled required Bentley to work outside, using balky equipment. Bentley seemed willing to pursue his arduous work—over the years he made pictures of thousands of snow crystals—not with any hope for financial gain but simply for the joy of discovery. Nicknamed Snowflake by his neighbors, he claimed his pictures were "evidence of God's wonderful plan" and considered the endlessly varied crystals "miracles of beauty."

In 1904, Bentley approached the Smithsonian with nearly 20 years of photographs and a manuscript describing his methods and findings. But geology curator George Merrill rejected the submission as "unscientific." (Eventually, the U.S. Weather Bureau published the manuscript and many of the photographs.) Avowing that "it seemed a shame" not to share the wonders he had recorded, Bentley sold many of his glass plates to schools and colleges for 5 cents apiece. He never copyrighted his work.

Bentley's efforts to document the artistry of winter garnered him attention as he grew older. He published an article in *National Geographic*. Finally, in 1931, he collaborated with meteorologist William J. Humphreys on a book, *Snow Crystals*, illustrated with 2,500 of Snowflake's snowflakes.

Bentley's long, frigid labors culminated just in the nick of time. The man who revealed the glittering secret of every white Christmas died that same year on December 23 at his Jericho farm. The weather forecast for the day promised occasional showers.

OWEN EDWARDS is a freelance writer based in San Francisco, California.

SMITHSONIAN INSTITUTION ARCHIVES (6); JERICHO ART MUSEUM

Dangerous Liaisons

Severe cold and fraternizing with the Mandan keep Meriwether Lewis' doctoring in demand

As the harsh winter wore on, the men and women of the corps spent more and more time with their Mandan Indian neighbors. Relationships sprang up—with resulting complications. When originally published, notes Gary Moulton, editor of the Lewis and Clark journals, some entries were, "in the delicate fashion of the era . . . rendered . . . into Latin."

January 5, 1805 [Capt. William Clark]
A cold day Some Snow, Several Indians visit us with thier axes to get them mended, I imploy my Self drawing a [map] of the Countrey from what information I have recved— A Buffalow Dance (or Medison) for 3 nights passed in the 1st Village, a curious Custom the old men arrange themselves in a circle & after Smoke a pipe, which is handed them by a young man, Dress up for the purpose, the young men who have their wives back of the circle go to one of the old men with a whining tone and [request] the old man to take his wife (who presents necked except a robe) and—(or Sleep with him) the Girl then takes the Old man (who verry often can Scercely walk) and leades him to a Convenient place for the business, after which they return to the lodge, if the Old man (or a white man) returns to the lodge without gratifying the man & his wife, he offers her again and again. . . . (we Sent a man to this Medisan [dance] last night, they gave him 4 Girls) all this is to cause the buffalow to Come near So that They may kill thim.

January 13 [Sgt. Patrick Gass]
In the evening one of our interpreters and another Frenchman who had gone with him to the Assiniboins for fur returned. They had their faces so badly frost bitten that the skin came off; and their guide was so badly froze that they were obliged to leave him with the Assiniboins.

January 14 [Clark]
Several men with the Venereal cought from the Mandan women.

January 21 [Clark]
A fine day nothing remarkable one [man] verry bad with the [syphilis] pox.

January 26 [Gass]
We have a blacksmith with us, and a small set of blacksmith tools. The blacksmith makes war-axes, and other axes to cut wood; which are exchanged with the natives for corn, which is of great service to us as we could not bring much with us.

January 27 [Clark]
I Bleed the man with the Plurisy to day & Swet him, Capt Lewis took of the Toes of one foot of the Boy who got frost bit Some time ago.

The Mandan buffalo ceremony, which William Clark called "a curious custom," was meant to lure the animals to their deaths.

BIBLIOTHÈQUE NATIONALE, PARIS, FRANCE, LAUROS / GIRAUDON / BRIDGEMAN ART LIBRARY

Includes American Eagle®. We know why you fly and AA.com are marks of American Airlines, Inc.

200,000 people. On 3,800 flights. Every day. Including one to finally meet Brad. Or is it Brian?

oneworld

AmericanAirlines®
AA.com

Europe

Deluxe River Cruises

from $1,898

including airfare*

- Cruise the Legendary Rivers of Europe
- 7 to 21 Days Aboard Europe's Newest and Most Deluxe River Cruise Ships
- Visit Grand Cities and Medieval Towns
- Shore Excursions & All Meals Aboard Ship Included
- Experience Art, Wine and Music Theme Cruises

China

Best Value to China

from $1,798

including airfare*

- 11 to 21 Days. Visit Beijing's Great Wall or Xi'an - Home of the Terra-Cotta Warriors
- Cruise the Yangtze River & Visit the Three Gorges
- Deluxe Hotels, Shore Excursions & Meals Aboard Ship All Included
- Cultural Highlights & Evening Performances

Russia

Deluxe River Cruises

from $2,898

including airfare*

- 14 to 16 days. Discover the rich history and culture of Russia
- Enjoy concerts and exciting performances by famous Russian and Cossack ensembles
- Optional extensions in Helsinki or the Baltics
- Sightseeing in every port with local guides

UNIWORLD™

See your Travel Agent or Call

800-645-0793

www.uniworld.com

*Prices listed for Europe/Russia from NYC/BOS. China is listed from LAX/SFO. Air taxes/government fees and port charges additional.

Caught in the Act! Ancient Sea Life Evolves

Over millions of years, delicate crinoids developed spikes and armor that thwarted hungry predators

REGIS LEFEBURE, JEFF ROTMAN / PHOTO RESEARCHERS

MOST VISITORS to the "Life in Ancient Seas" hall at the National Museum of Natural History amble right past the modest glass display case full of fossilized crinoids, cousins of starfish and sand dollars. But scientists say the ancient specimens are definitely worth a second look: a new study of changes in crinoid anatomy over millions of years has provided unusual evidence of evolution in action.

With long, feathery feeding arms, crinoids may resemble marine plants, but they're animals (echinoderms, technically) that filter food from the water. The stalked variety, called sea lilies, live only at depths of 300 feet or more. Stalkless crinoids, known as feather stars, usually live in shallow water, mainly in tropical reefs, where they hide in crevices during the day and glide out to feed at night.

The new research makes novel use of what might be called paleoforensic

Research on 350 million-year-old fossil crinoids (left) sheds new light on today's descendants (a feather star).

Gahn and co-workers analyzed 2,575 fossilized crinoids for battle scars.

evidence: if a fish bites off a crinoid's arm, the regenerating arm is skinnier than the old stump, making the injury easy to spot. Because crinoids have been around for 500 million years, the scars in fossil crinoids can yield clues to how the animal responded to predators over the ages. Paleontologists Forest Gahn at the museum and Tomasz Baumiller at the University of Michigan focused on crinoids that were preserved when storms whipped up seafloor sediments and quickly buried the wispy creatures. "They all lived and died at one time," Gahn says. "You have a snapshot of the ocean floor, which you can survey just like a modern community."

Gahn peered at a lot of those snapshots, examining 2,575 crinoid fossils from across the Northern Hemisphere. Less than 4 percent of crinoids had arms that were regenerating, he discovered, in fossils older than 380 million years. At that point, new predators such as armored, shell-crushing sharks called placoderms began to appear, and the prevalence of injured crinoid arms jumped threefold. At one site in present-day Iowa, the most abundant crinoid—and at 13 inches high, the tallest and most exposed to swimming carnivores—endured the highest rate of attack. But some crinoids, over time, fought back. Within roughly five million years, Gahn and Baumiller reported in the journal *Science*, the tallest crinoids were endowed with sturdy spines and thick armor, defense mechanisms that would have arisen randomly in some individuals, bettering their chances of repelling attackers and reproducing. Paleontologist David Meyer of the University of Cincinnati says that Gahn and Baumiller are "documenting beautifully" the evolutionary impact predators can have on prey.

If it's a bit puzzling why fish would want to munch on crinoid arms, which are little more than the mineral calcite—not exactly good eating—today's crinoids hint at the reason. The echinoderm's delicate arms host tasty shrimp, worms, snails, even small fish. Gahn and Baumiller suspect that ancient predators had their eyes on similar guests, which can be seen clinging to crinoids in some fossils. In fact, the pair's latest study has found support for the idea: regenerating arms were twice as common in snail-infested crinoids than snail-free ones.

The scene-stealers at the museum may be the great carnivores, like *Tyrannosaurus rex* with its toothy snarl. But though the humble crinoid may never star in a horror movie, its fossils, in an overlooked case in the corner, offer a surprisingly rich tale of evolution's cunning responses to long-vanished predators. —*ERIK STOKSTAD*

FROM THE ATTIC

SONG CATCHER In February 1916 Frances Densmore, noted for the recordings she made of Native American song for the Smithsonian's Bureau of American Ethnology, was photographed outside the Castle building with Mountain Chief, 68, a celebrated member of Montana's Blackfeet tribe. As a warrior 50 years earlier, he had beaten back the Gros Ventre and Crow Indians, and in 1895 he ceded to the government tribal lands that would become Glacier National Park. The picture is well known to scholars, but it has always been puzzling because the horn on the Edison phonograph is the kind used for listening, not recording. A note by Densmore recently found in her scrapbooks at the Library of Congress explains why: the photograph, taken on short notice at the behest of Secretary of War Hugh L. Scott, was staged because her recording horn was in storage. Today the Smithsonian-Densmore collection resides at the American Folklife Center in the Library of Congress, where visitors can listen to wax-cylinder recordings of more than 3,500 Native American songs. But none by Mountain Chief. —*BETH PY-LIEBERMAN*

REGIS LEFEBURE; AP / WIDE WORLD PHOTOS

It all adds up to 5 stars.

First, consider the front side and side curtain airbags. Then, add to that the rigid safety cage. Next, bear in mind the front and rear crush zones. Finally, take into account the Traction Control System (TCS) and anti-lock braking (ABS). And remember, it all comes standard. Just like the 5-star frontal-crash-test safety rating.*

HONDA

The Accord V-6 Sedan

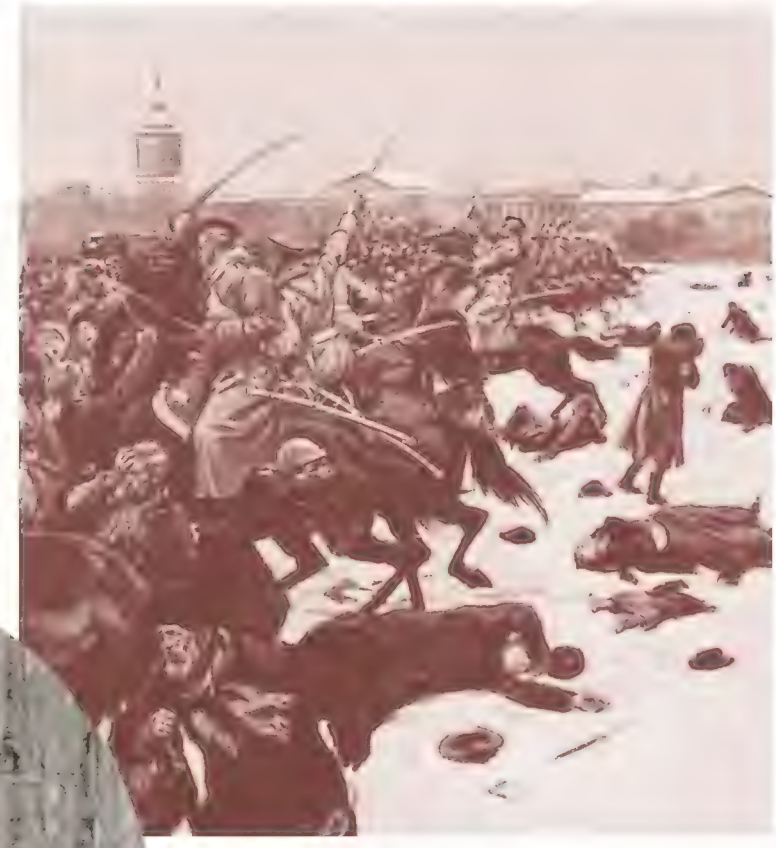
honda.com 1-800-33-Honda *National Highway Traffic Safety Administration frontal crash test: February 2003. EX V-6 model shown. © 2004 American Honda Motor Co., Inc.

THIS MONTH IN HISTORY

JANUARY ANNIVERSARIES – MOMENTOUS OR MERELY MEMORABLE

90 YEARS AGO: GLOWING SUCCESS
French inventor Georges Claude patents an electrified, neon-filled luminescent tube on January 19, 1915, and neon signs soon light up the night. After marketing them first in France, in 1923 Claude begins selling his signs in America; the first two go to a California Packard dealership for $24,000. Although neon gas glows red, today's neon signmakers produce some 150 colors using argon, mercury and phosphor-coated tubes.

100 YEARS AGO: BLOODY SUNDAY
Thousands of striking workers led by a priest, Father Gapon, gather on January 22, 1905, in front of the Winter Palace in St. Petersburg, Russia, to give Czar Nicholas II a list of demands for civil reform. Czarist troops meet them with gunfire, killing 130. The violence sparks increased unrest, and by October a chastened Nicholas agrees to allow an elected legislative assembly. It is the first limit to Nicholas' power, but it won't be the last.



50 YEARS AGO: DIVA'S OVERDUE DEBUT
Contralto Marian Anderson, 57, crosses the color line to become the first African-American to sing with the Metropolitan Opera, January 7, 1955. Sixteen years after she was famously barred from performing in Washington, D.C.'s Constitution Hall, her entrance at the Met (as Ulrica in Verdi's *Un Ballo in Maschera*) is greeted with "frenetic applause" by the New York audience; critics hail her "full and lovely voice." Anderson dies in 1993 at age 96.

160 YEARS AGO: QUOTH THE PARROT? NEVERMORE!
Edgar Allan Poe publishes his melancholy poem "The Raven" in the *New York Mirror*, January 29, 1845. It describes a bereaved lover who tortures himself with a bird's repetition of the word "nevermore." A beautiful woman's death, Poe explains later, "is unquestionably the most poetical topic in the world." And why a raven? It fit the mood better than his first idea, a parrot. Poe dies in 1849 at age 40.

70 YEARS AGO: MURDER MOST FOUL
Bruno Richard Hauptmann goes on trial in New Jersey for the kidnap and murder of Charles Lindbergh's baby son, Charles Jr., January 2, 1935. Hauptmann, a German carpenter, was caught spending the ransom money. The sensational trial is covered by more than 150 journalists and features testimony by Lindy himself. Hauptmann is convicted and, though some people remain unconvinced of his guilt, is executed April 3, 1936.

100 YEARS AGO: BIG BLING
Mine superintendent Frederick Wells spots a sparkle in South Africa's Premier mine in January 1905 and unearths the largest gem-quality diamond ever found. Weighing 3,106 carats (about one and one-third pounds), the "Cullinan," as it is named, is presented to Britain's king Edward VII on his birthday. When cut, the stone produces 9 large gems (the largest, the 530 carat "Star of Africa," is set in the royal scepter) and 96 small ones. Wells gets a $10,000 reward.

—ALISON MCLEAN

RICHARD CUMMINS / CORBIS; RARE BOOK AND MANUSCRIPT LIBRARY UNIVERSITY OF PENNSYLVANIA, MARIAN ANDERSON COLLECTION OF PHOTOGRAPHS; HULTON ARCHIVE / GETTY IMAGES; BETTMANN CORBIS (2); HULTON ARCHIVE / GETTY IMAGES

Take a wild guess where your "Canadian" medicine is actually coming from.

Canada

Belize

China

Drug importation is a game where no one wins. And if new laws pass, drugs that have not been approved by the U.S. Food and Drug Administration (FDA) will have a green light to start pouring into the U.S. The World Health Organization estimates that 10% of the world's drug supply is counterfeit, and as high as 60% in some countries. The FDA has said that if Congress opens the floodgates to importation, even the entire U.S. Army would not be big enough to carry out the inspections and take the other steps necessary to protect the public against drugs that are not safe or not effective. You need to learn more about importation bills before Congress. Because if you don't know what medicines you're taking, you lose every time.

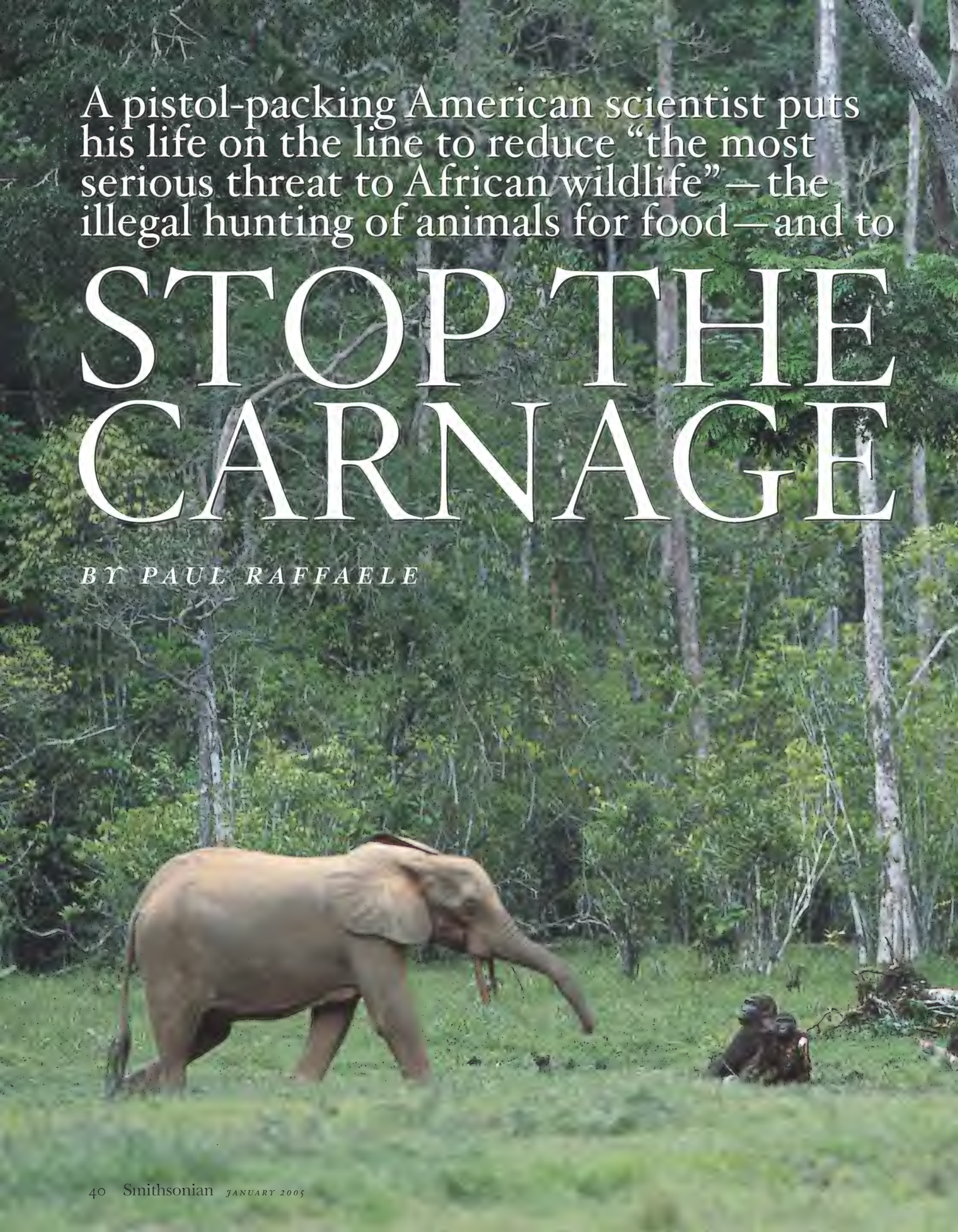
Today's medicines finance tomorrow's miracles.℠ gsk GlaxoSmithKline

Sources: World Health Organization, Reported by Interpol, First Global Congress on Combating Counterfeiting, May 25-26, 2004; U.S. Senate Judiciary Committee Hearing. "Drug Importation." 108th Congress, 2nd Session. July 14, 2004. ***Learn more about the safety risks of imported drugs at www.fda.gov/importeddrugs.***

A pistol-packing American scientist puts his life on the line to reduce "the most serious threat to African wildlife"—the illegal hunting of animals for food—and to

STOP THE CARNAGE

BY PAUL RAFFAELE



A recent study of wildlife in central Africa concluded that the demand for bushmeat was spurring the slaughter of endangered animals (forest elephants and western lowland gorillas in the Congo Basin). David Greer (above right, with a Pygmy tracker and a red duiker killed in a poacher's snare) leads anti-poaching patrols in a Central African Republic forest preserve.

THE DENSE TREETOP CANOPY plunges day into night as we enter the rain forest. We are about 300 miles north of the Equator, in the Central African Republic, and the jungle vibrates with the haunting shrieks of insects as we clamber over fallen logs and step around giant trees strung with thorn-studded vines. Lurking overhead, I am told, are cobras. Leading the way is Babangu, a Pygmy tracker. He is followed by two tall Bantu paramilitary guards, clad in camouflage and toting AK-47 assault rifles. David Greer, a 35-year-old American who leads the anti-poaching patrols, is armed with a 9 millimeter pistol.

Shotgun shells litter the animal paths. "They're fresh, the poachers have probably been here today," Greer whispers. I gulp with fear, knowing that the poachers carry AK-47s and elephant guns. Babangu points to a poacher's snare—a wire loop buried in the fallen leaves and attached to a bent sapling. Greer snips the wire and uproots the trap.

Babangu leads us to a red duiker, a dog-size antelope, caught in a snare. It's dead. "This could have been a gorilla, a chimp or a leopard," Greer whispers as we squat by the body. His eyes harden as he sees that the duiker had almost torn off a front leg trying to free itself from the trap.

We leave the animal in search of more snares. In two hours walking the jungle, we find another 171. Greer and his 48 men have destroyed more than 30,000 of the illegal devices in the past year, putting a big dent in the poachers' haul of forest an-

imals. But Greer knows that much more needs to be done.

Later, on our way back, we pass by the spot where the duiker had been snared. The carcass has vanished. Greer grimaces. "The poachers must have been nearby," he whispers. "If we'd stumbled on them, there could have been shooting."

ILLEGAL HUNTING is devastating wildlife across sub-Saharan Africa. "The African bushmeat trade is *huge*," Jane Goodall, the distinguished primatologist (and Greer's mentor), told me in an e-mail. "Tons and tons of wild animal meat [are] trucked into the urban centers, and a good deal is shipped to other African countries and to other continents."

A study in the journal *Science* this past November said the bushmeat trade was among the "greatest threats to the persistence of tropical wildlife." The researchers—from England, Ghana, South Africa, the United States and Canada—found that increased hunting of wild animals in Ghana had led to sharp declines in 41 species. They went on to suggest that the bushmeat trade had grown partly in response to the depletion of fish off West Africa by foreign and domestic industrial fleets; deprived of a traditional protein source, people turned to the forests for food. To curb the traffic in bushmeat, the researchers called for both limiting "the access of large and heavily subsidized foreign fleets to fish off West Africa" and "increasing the size, number and protection of wildlife reserves."

In the Congo Basin—an area consisting of the Republic of the Congo, the Democratic Republic of the Congo, Cameroon, the Central African Republic (CAR), Gabon and the Republic of Equatorial Guinea—some researchers estimate that up to five million metric tons of bushmeat are traded each year, according to the Bushmeat Crisis Task Force, a Washington, D.C.-based conservation consortium.

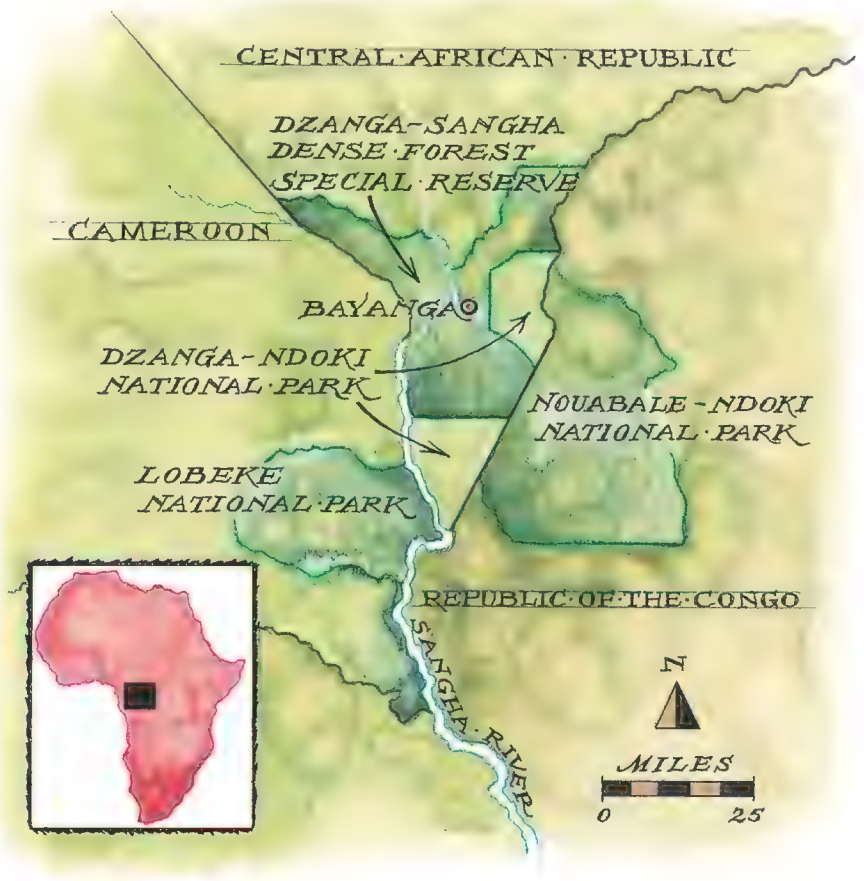
Another threat to wildlife is infectious agents, including the deadly Ebola virus, which has stricken primates in central Africa. It also poses a danger to people who eat or come into close contact with infected animals; some experts say that Ebola-contaminated bushmeat smuggled into the United States could trigger an Ebola outbreak here.

All told, the number of western lowland gorillas in the Congo Basin has fallen from about 110,000 to fewer than 40,000 in the past two decades because of poaching, loss of habitat to logging and development, and disease, says Richard Carroll, director of an African program for the World Wildlife Fund (WWF): "It's a crisis situation, and that's why the anti-poaching program is vitally important."

Greer risks his life virtually every day to protect some of Africa's most significant animals, including western lowland gorillas and forest elephants. He is based in the Dzanga-Sangha Dense Forest Special Reserve, home to one of the richest and most diverse assemblies of animals, birds, fish and insects on earth. The 1,220-square-mile sanctuary in the CAR connects with protected forestlands in Cameroon and the Democratic Republic of the Congo, forming a 4,000-square-mile wilderness reserve overseen by the three governments with financial help from the WWF and the German Development Agency. Greer is employed by the WWF as a park adviser and empowered by the CAR government to enforce anti-poaching laws. A primatologist who had previously never wielded anything more lethal than a ballpoint pen, he's one of a new breed of eco-warrior who carries a gun in the fight against the slaughter of forest animals.

Greer's efforts have led to the arrest of 20 poachers (rangers apprehend a suspect in Dzanga-Ndoki National Park). Still, hunters continue to slaughter western lowland gorillas in the Congo Basin (a female and youngster in a Republic of the Congo sanctuary).

TO REACH THIS embattled tropical treasure, I fly from Paris to Bangui, the capital of the CAR, a landlocked country



PAUL RAFFAELE, a freelance writer in Australia, covers Africa, Asia and South America. This is his first article for SMITHSONIAN.

MARTIN HARVEY; MIKE REAGAN; PP. 40, 41 BRUCE DAVIDSON / NATURE PICTURE LIBRARY; P. 41 PAUL RAFFAELE; P. 43 BRUCE DAVIDSON / NATURE PICTURE LIBRARY

of about 240,000 square miles—slightly smaller than Texas—tagged by the World Bank as one of the world's poorest nations. Bangui is a tragic and frightened city, its residents cowed by decades of violent coups d'état by officers of a ruthless national army. Nestled against the Oubangui River, Bangui is a hot and humid relic of French colonialism littered with run-down buildings, potholed roads and crumbling monuments to former dictators. Surly police carrying clubs prowl the streets. Soldiers toting assault rifles and manning antiaircraft guns tear through the city in trucks escorting the country's military ruler. Foreign visitors mostly stay in one of several hotels that look as if they belong in a Graham Greene novel, their lobbies the haunt of shady characters whispering in Sango, the local language, and French. The hotel swimming pools are thronged by frolicking prostitutes, some as young as 12.

In the city's central, open-air market, Bantu women clad in colorful robes sell piles of smoked bushmeat—mostly duiker, Greer says, but occasionally great apes and elephants. To local residents, one of the main appeals of bushmeat is low cost; Greer says he has seen smoked gorilla meat selling for as little as 25 cents a pound in a village market. People who have traditionally lived off the rain forest view hunting and trapping as their prerogative, especially in the poorest areas. "Because they are very poor and have a difficult time finding jobs, they feel they should have the right to utilize the forest," says Pascal Dangino, a former poacher who now works for Greer as a guard. "Conservation is a difficult concept for them to understand."

"The African bushmeat trade is huge," says primatologist Jane Goodall (above, a mustached monkey). "Tons and tons of wild animal meat [are] trucked into the urban centers . . . and other continents. It is absolutely unsustainable."

I leave Bangui by SUV to get to the Dzanga-Sangha forest reserve about 300 miles to the southwest along a bone-shaking dirt road. I am accompanied by Angelique Todd, an English wildlife biologist who studies gorillas, and along the way we pass a handful of impoverished towns brimming with men and women playing cards, sitting by the road chatting and dozing in the sun. Nearing the reserve, I spy the igloo-shaped huts of the Bayaka Pygmy clans, who have inhabited the Congo Basin for more than a millennium. Masters of the rain forest, the Pygmies are among Greer's most valued allies.

Greer, wearing shorts and going shirtless and barefooted, greets me at his spartan wood bungalow in Bayanga, a village on the Sangha River at the republic's southernmost tip. We had met seven years earlier in Rwanda, where he was studying mountain gorillas with the Dian Fossey Gorilla Fund International. "Hop in," he says, opening the door of a mud-splattered SUV. "Let's go see some gorillas."

As we drive through Bayanga, men and women wave, and smiling children run alongside the truck calling out, "Darveed." He returns their greetings in Sango. In the seven years he has lived here, he has clearly made an effort to blend in. "They know I like to live with them and eat their food, enjoy their culture and play basketball with them," he says.

On Bayanga's outskirts we enter a dense rain-soaked jungle, and a sign featuring a painted gorilla shows that we have reached the reserve's crown jewel, the 470-square-mile Dzanga-Ndoki National Park. Greer tells me the park is inhabited by 88 species of mammals and 379 species of birds, including many rare creatures hunted by poachers. "All fishing, gathering, hunting, mineral and forest exploitation are prohibited in the park, which is a vital reservoir for endangered species," he says. Native Africans, he adds, are allowed to hunt, fish and gather plants outside the national park, in the Dzanga-Sangha Dense Forest Special Reserve.

The farther Greer goes into the park, the wider he smiles, but then, he believes he was born to a life in the wilderness, despite his city roots. Raised in Kansas City, he says he was something of a street fighter as a youth. His father, a lineman for Southwestern Bell Telephone Company, took him fishing, hunting and camping. Greer won a baseball scholarship to Baker University in Baldwin City, Kansas, where he studied psychology; after college, he worked briefly as a psychologist in a mental health clinic in Kansas City. But in 1994 he abandoned psychology to work with chimpanzees at the Jane Goodall Institute for Wildlife Research, Education and Conservation in Tanzania. Refused a resident's visa, he moved to Karisoke in Rwanda, the mountain gorilla research center founded in 1967 by Dian Fossey.

Greer well remembers the first mountain gorillas he ever saw, a silverback that Fossey had named Pablo and six females with their young, chomping on nettles and other plants on the slope of a volcano in Rwanda. "I felt like the luckiest human being on earth. I felt I was meant to be here, this was my calling," he says. "Every time I saw the mountain gorillas after that, my stomach would tighten with emotion. They're so big and beautiful, and yet so peaceful."

Greer had arrived in Rwanda after the Interahamwe—gangs of extremist Hutus—had shocked the world by killing up to nearly a million rival Tutsis and moderate Hutus. He often came across the marauders' fresh trails along the

MARTIN HARVEY

mountain slopes and saw armed Interahamwe in the distance. "There were bodies all over the place," he remembers. Once, while he was observing foraging gorillas, the animals came across a dead Hutu riddled with bullets. "The gorillas glanced at the body, then stepped around it," he says.

He continued to study the animals, driving an hour a day from the small city of Ruhengeri to the foot of the Virunga volcanoes, then hiking up to four hours into the forest where the gorillas lived. "I felt someone had to be with them every day to make sure they weren't harmed," he says. His work was finally disrupted when the Interahamwe began executing foreigners. In January 1997, gunmen stormed into Ruhengeri and fatally shot three Spanish doctors and wounded an American aid worker. The next day, Greer left for Kigali, the capital, and he says he stayed "until the rebels were eventually flushed back into the Democratic Republic of the Congo."

Several months later, Karisoke temporarily suspended the monitoring of gorillas, and Greer moved again, to a swampy jungle straddling the Republic of the Congo-CAR border. There he studied western lowland gorillas at Mondika, a research station run by Diane Doran, a physical anthropologist at the State University of New York at Stony Brook. Greer, who would later serve as Mondika's director for two years until 2001, was intrigued by the differences between mountain gorillas and the western lowland species—the kind most commonly seen in zoos. Mountain gorillas forage in family groups along lush alpine slopes for wild celery, thistles, shoots and occasionally bark and insects. In contrast, lowland groups seek the leaves and sugary fruit of high jungle trees, shinnying up with astonishing agility to balance on boughs while they strip the branches. Also, Greer says, compared with mountain gorillas, the lowland animals "are much shyer, and are hard to find because they are hunted for food and travel much farther each day."

WHILE VISITING THE Dzanga-Sangha reserve's headquarters at Bayanga, Greer sometimes encountered Chloe Cipolletta, a vivacious young Italian wildlife biologist and gorilla researcher. The daughter of an Italian banker, Cipolletta, 34, could have lived in a luxurious Roman villa and been courted by sleek Armani-clad young men. Instead, she has made her home since 1998 in a thatched hut at her base camp in Bai Hokou. (A *bai* is a forest opening with a water source that attracts wildlife.) In July 2001, three years after Greer and Cipolletta met, they were married in a Pygmy wedding ceremony beneath the high trees at Bai Hokou. Following the custom of the diminutive forest people, the newlyweds exchanged sticks—the significance of the ritual was not explained to them—and then celebrated with the Pygmies, singing and dancing until noon the next day. "Pygmies are inexhaustible when it comes to partying," Greer says.

AN HOUR AFTER LEAVING Bayanga, we reach Bai Hokou, a huddle of thatched huts on a heavily forested hill and surrounded by a wire barrier hung with tin cans that frighten off forest elephants when they run into the fence. Cipolletta, standing at an outdoor table, is separating gorilla dung with twigs to determine what fruits the apes had been eating—information that becomes increasingly important as gorilla habitat disappears. She has counted more than 100 plants they use as food. When I ask her about Greer, she says, "He's my Tarzan. He likes to climb trees and is the first to try anything."

"Does that mean you're his Jane?"

"No," she says, laughing. "I'm his Cheetah."

Based at the camp with Cipolletta are several Pygmy animal trackers and three research assistants, including two 26-year-old Americans, Jessica Zerr and Sarah Pacyna. Zerr, a Californian, found the work hard at first and has had four bouts with malaria. But she never despaired, she says: "To be with the gorillas was my life's dream."

The next morning, Greer and I leave with Ngbanda, a Pygmy, to find a gorilla group that he and Cipolletta have "habituated," or spent so much time observing that the animals have become accustomed to human beings. As a barefooted Ngbanda leads us along a path carved by the feet of generations of forest elephants, the rain-speckled jungle presses in from all sides, exuding a dizzying odor of dank earth and foliage. We push past tree branches blocking our way, shuffle through streams and duck away from *djele*—vines studded with thorns that festoon the tracks. Tiny, stingless sweat bees swarm us, buzzing around our ears and mouths and dive bombing our eyeballs.

Suddenly, Ngbanda halts. "Elephant," Greer murmurs. In the shadowy foliage I spy a trunk and tusks. Compared with plains elephants, forest elephants tend to live in smaller herds, thanks partly to their dense, tangled territory, and they also are smaller in size. Still, at some eight feet high and three and a half tons for a mature bull, forest elephants are formi-

For more than a year, Greer (above, with red hair, with, from left, guard Pascal Dangino, Pygmy tracker Babangu and guard Ngaina Didier) has been hiring new guards and putting together a network of sources to provide information on the poachers.

PAUL RAFFAELE

dable. "Run like hell if he charges, because they hate humans, with good reason," Greer whispers. Thankfully, the elephant ignores us.

Two hours later, as we push through a bamboo thicket where the air is so humid it seems to sweat, Ngbanda halts us. "*Ebobo*," he mouths. Gorillas. Greer and I see nothing, but he trusts the Pygmy trackers. "They seem to have X-ray vision," he says. "They see and hear things in the jungle that we can't."

Ngbanda points at a giant tree. About 50 yards above us, almost hidden by the foliage, a potbellied female feasts on fruit, while below her an infant nestles on another branch chewing leaves. Moments later we hear, somewhere in the thicket, the *thock-thock-thock* of a silverback pounding his barrel chest in warning. Ngbanda spies him about 15 yards ahead and drops to the ground, followed by Greer and then me. "Makumba," Greer whispers, identifying the animal by name. We crouch to mollify the huge ape, a primate gesture of humility and respect that silverbacks understand, indeed expect.

Three years after they met, Greer and an Italian biologist named Chloe Cipolletta (separating gorilla dung to identify foods the animals eat) were married in a Pygmy wedding ceremony. "Pygmies are inexhaustible when it comes to partying," says Greer.

Moments later, Makumba disappears. Listening to gorilla sounds that Greer and I cannot distinguish, Ngbanda plots the path of the silverback, and we follow through the undergrowth and down an elephant track. Suddenly, Makumba leaps onto the track about ten yards ahead, his huge furry face scowling. With a forearm as big as a man's thigh, he slams a bunch of saplings repeatedly against the ground. "He's displaying his authority over us," Greer says, "warning us not to come closer." We steer clear of him and don't see him again.

THAT NIGHT, back at Bai Hokou, I use the camp's "shower"—a spring-fed waterfall that feels delightfully cold—and then rejoin Greer and Cipolletta. I ask him what made him take up arms against the poachers a year ago. He says he and Cipolletta had been hearing gunshots for days on end and knew from the Pygmies that poachers were slaughtering large numbers of elephants, gorillas and other animals. The couple had also seen lots of bushmeat in the Bayanga market. And they knew that the leader of the anti-poaching patrols had quit and that the guards had become "demotivated," as he puts it, "and had a sense of helplessness with the barrage of poaching."

So last October, Greer accepted the challenge. With the help of his deputy, Josue Nambama, a well-connected Bantu, he concentrated on building a network of sources to provide information on the poachers. (I saw several men approach him at the village soccer field or at his home to provide information, sometimes for a small reward.) He also hired new guards, putting one team on alert 24 hours a day and assigning another to find and destroy snares. In addition, guards set up roadblocks to catch bushmeat traders and patrol animal-rich areas in the reserve, up to ten days in the field at a time. It is dangerous work. On one snare patrol, guards and poachers stumbled on each other, and in the confusion, a poacher who shot at the guards missed and killed one of his own porters. Because the anti-poaching effort is short on funds, guards are heavily outgunned by poachers, having just four AK-47s and seven old Russian bolt-action rifles. Many guards go on patrol armed with only their bare fists.

Greer and Nambama's efforts have led to the arrest and imprisonment of 20 poachers and discouraged dozens more. A CAR forestry and sustainable development official, Jean-Bernard Yarissem, says bushmeat has become noticeably less available in the Bayanga marketplace since Greer took over the anti-poaching effort. Jean-Rene Sangha, once the reserve's most notorious elephant killer, says, "Before, there were many poachers, but with David's arrival poaching decreased very much."

When I first met Sangha, whose parents named him after the nearby river and who now works with Greer as a guard, the wiry 26-year-old stared at me and said he'd begun to learn the poacher's bloody trade at age 10 from his older brothers. He said he has slaughtered many gorillas—silverbacks, females and young—for bushmeat. He also admits to having killed "more than 100 elephants." Flaunting a devil's courage, Sangha shot the elephants at point-blank range, then smuggled the tusks across the border into Cameroon. "Before, the price of one kilo of tusk was 8,000 CFA [about $15], but now one kilo costs 12,000 CFA [about $22]," he says, the market having inflated due to scarcity. With a pair of exceptionally big tusks weighing about 60 kilos, the 720,000 CFA (about $1,400) would keep a family in Bayanga for more than a year. Selling the elephants' meat was a bonus.

Sangha, who says he lost two brothers in poaching accidents, approached Greer about working with him on the patrols. Greer offered him a guard job at about 90,000 CFA a month, or more than twice a laborer's wage. Sangha accepted. "I'll help the other guards because the forest is very large and I know how the poachers work," he says. "I was a poacher, I know how to struggle against poachers."

PAUL RAFFAELE

AFTER POACHING, the threat to the Congo Basin's gorillas that most concerns Greer is Ebola, the highly infectious hemorrhagic fever virus that was first recognized in human beings, in central Africa, in 1976. The virus is passed on by direct contact with victims' tissues or body fluids, and kills up to 90 percent of people infected. No cure for the disease exists, and many sufferers die quickly and horribly with massive internal and external bleeding. Ebola virus infects gorillas and other nonhuman primates with similarly lethal effects. A recent Ebola outbreak in the Republic of the Congo killed up to 90 percent of the gorillas in some areas; at Lossi Gorilla Sanctuary, 139 out of 145 gorillas died from Ebola, Greer says.

The disease poses a threat to the Dzanga-Sangha gorillas. "It's now been reported at the Congo's Odzala National Park, which has Africa's highest density of gorillas," Greer explains. "That's less than a few hundred miles away in a contiguous forest with some barriers, but nothing too extreme to be able to block it." Not long ago, he and Cipolletta arranged a meeting of local health officials and village chiefs, and urged them to warn their people not to slaughter or eat monkeys, gorillas or chimps. "That's how it spread in the [Republic of the] Congo," he says, meaning that people acquired the disease from handling an infected primate and passed the virus to others.

Jean-Rene Sangha (above) was once the reserve's most notorious elephant hunter. He admits to having killed "more than 100" of the animals. Now he works for Greer. "I know how the poachers work," he says. "I know how to struggle against poachers."

Some experts are concerned that bushmeat tainted with Ebola virus or other infectious agents might be smuggled into the United States. "Thousands of west and central Africans live in Florida, California, New York, as well as Atlanta and many other cities, and when they celebrate weddings, birthdays or other occasions, [many] want to eat bushmeat from their homeland," says Richard Ruggiero, an Africa program officer for the U.S. Fish and Wildlife Service. "Because its entry is illegal, it's smuggled in as other meat or is brought in undeclared by travelers." Most of the smuggled bushmeat confiscated so far, says Ruggiero, has been cane rat, a two-foot-long field rodent weighing up to ten pounds, but other wild meat has also turned up.

In 2002, customs officials at the Hartsfield-Jackson Atlanta International Airport found a smoked primate carcass in the suitcase of a passenger from Cameroon; the passenger was reportedly carrying the bushmeat to a traditional wedding celebration. Inspectors at other U.S. airports have also reported a recent rise in seizures of African bushmeat, including a 600-pound shipment in 2003 of duiker, squirrels, bats and rats hidden beneath dried fish at New York City's JFK International Airport. The same year, a shipment of 2,000 baboon snouts bound for the United States was seized at Schiphol Airport in Amsterdam. "We have only 100 inspectors across the United States, and so it's scary because we're certainly only seeing the tip of the iceberg with bushmeat," says Mike Elkins, a U.S. Fish and Wildlife Service special agent in Atlanta.

Trish Reed, a Wildlife Conservation Society field veterinarian who has done research at Bomassa in the Republic of the Congo, is arranging to test primate carcasses for Ebola virus at a lab in Libreville, Gabon. She says the danger of Ebola getting into the United States by means of infected bushmeat is currently low. "Smoking the meat almost certainly kills any Ebola it might have," she says, "but we are not 100 percent certain." Indeed, in 2003 the U.S. Centers for Disease Control and Prevention warned of the dangers of prepared bushmeat, saying that "smoking, salting, or brining may slow down bushmeat's decay, but may not render bushmeat free of infectious agents." The Ebola threat, whether to primates directly or to people exposed to the infected animals, has added urgency to conservation efforts: saving gorillas could also mean saving human lives.

NEARING DUSK ONE DAY, Greer strides barefoot through the jungle heading for Dzanga Bai, the reserve's most spectacular forest opening. He is carrying a pack of red wine, cheese and baguettes for a monthly ritual. At the bai, a sandy salt lick the size of three football fields, 75 forest elephants have gathered, part of a recent resurgence that some attribute to Greer's efforts. Researchers have identified more than 3,300 elephants using the bai.

Cipolletta has gotten there first, and now the couple climb to a tree-high platform to watch in safety. As calves scurry alongside their mothers, a pair of young bulls jostle for dominance by locking tusks and shoving hard. Ignoring the ruckus, other elephants kneel by the mineral-rich water and drink. Calves wallow merrily in the mud until they look like chocolate elephants. Darkness arrives and a full moon turns the forest opening a ghostly silver. Greer and Cipolletta settle in for the night under their mosquito nets as the elephants' growling, rumbling, screaming and trumpeting echo around the bai. "Every time I'm at the bai," Greer says, "it's a magnificent feeling, and it gives me a sense of optimism that there is the chance to have some long-term success."

PAUL RAFFAELE

Digging in the shadow of legendary Capt. John Smith, archaeologists are unearthing ruins long thought lost to the James River. With the 400th anniversary of the colony's founding approaching in 2007, the site has taken on new significance.

RETHINKING JAMESTOWN

America's first permanent colonists have long been considered lazy and incompetent. But new evidence suggests that it was a prolonged drought—not indolence—that almost did them in

BY JEFFERY L. SHELER

PHOTOGRAPHS BY LYNDA RICHARDSON

Jamestown's structures (in an idealized 1950s view) were most likely crude. The colonists complained of disrepair and decay.

TO THE ENGLISH VOYAGERS who waded ashore at the mouth of the Chesapeake Bay on a balmy April day in 1607, the lush Virginia landscape must have seemed like a garden paradise after four and a half months at sea. One ebullient adventurer later wrote that he was "almost ravished" by the sight of the freshwater streams and "faire meddowes and goodly tall trees" they encountered when they first landed at Cape Henry. After skirmishing with a band of Natives and planting a cross, the men of the Virginia Company expedition returned to their ships—the *Susan Constant*, *Godspeed* and *Discovery*—and the 104 passengers and crew continued up the Powhatan River (soon to be renamed the James in honor of their King, James I) in search of a more secure site.

They thought they had found it on a marshy peninsula some 50 miles upstream—a spot they believed could be defended against Indians attacking from the mainland and that was far enough from the coast to ensure ample warning of approaching Spanish warships. They set about building a fortress and clearing land for the commercial outpost they had been sent to establish and which they called "James Cittie." They were eager to get down to the business of extracting gold, timber and other commodities to ship back to London.

But Jamestown proved to be neither paradise nor gold mine. In the heat of that first summer at the mosquito-infested settlement, 46 of the colonists died of fever, starvation or Indian arrows. By year's end, only 38 remained. Were it not for the timely arrival of British supply ships in January 1608, and again the following October, Jamestown, like Roanoke a few years before, almost certainly would have vanished.

It is little wonder that history has not smiled on the colonists of Jamestown. Though recognized as the first permanent English settlement in North America and the setting for the charming (if apocryphal) tale of Pocahontas and Capt. John Smith, Jamestown has been largely ignored in colonial lore in favor of Massachusetts' Plymouth Colony. And what has survived is not flattering, especially when compared with the image of industrious and devout Pilgrims seeking religious freedom in a new land. In contrast, the Jamestown settlers are largely remembered as a motley assortment of inept and indolent English gentlemen who came looking for easy money and in-

---

JEFFERY L. SHELER is the author of a forthcoming book on American evangelicals. He lives in Portsmouth, Virginia. Richmond photographer LYNDA RICHARDSON is a frequent contributor.

NATIONAL PARK SERVICE, COLONIAL NATIONAL HISTORICAL PARK; MIKE REAGAN

stead found self-inflicted catastrophe. "Without a trace of foresight or enterprise," wrote historian W. E. Woodward in his 1936 *A New American History*, " . . . they wandered about, looking over the country, and dreaming of gold mines."

But today the banks of the James River are yielding secrets hidden for nearly 400 years that seem to tell a different story. Archaeologists working at the settlement site have turned up what they consider dramatic evidence that the colonists were not ill-prepared dandies and laggards, and that the disaster-plagued Virginia Colony, perhaps more than Plymouth, was the seedbed of the American nation—a bold experiment in democracy, perseverance and enterprise.

The breakthrough came in 1996, when a team of archaeologists working for the Association for the Preservation of Virginia Antiquities (APVA) discovered a portion of the decayed ruins of the original 1607 Jamestown fort, a triangular wooden structure many historians were certain had been swallowed by the river long ago. By the end of the 2003 digging season, the archaeologists had located the fort's entire perimeter on the open western edge of the heavily wooded 1,500-acre island; only one corner of it had been lost to the river. "This was a huge find," William Kelso, chief archaeologist at the site, said shortly after the discovery. "Now we know where the heart is, the center of the colonial effort, the bull's-eye. We know exactly where to dig now, and we will focus our time and resources on uncovering and analyzing the interior of the James Fort."

Since then, Kelso and his team have excavated the ruins of several buildings inside the fort's perimeter, along with thousands of artifacts and the skeletal remains of some of the first settlers. Only a third of the site has been excavated, and many of the artifacts are still being analyzed. Yet the evidence has already caused historians to reconsider some long-held assumptions about the men and the circumstances surrounding what Yale University history professor emeritus Edmund S. Morgan once called "the Jamestown *fiasco*." "Archaeology is giving us a much more concrete picture of what it was like to live there," says Morgan, whose 1975 history, *American Slavery, American Freedom: The Ordeal of Colonial Virginia*, argued that Jamestown's first years were disastrous. "But whether it turns the Virginia Company into a success story is another question."

The large number of artifacts suggests that, if nothing else, the Virginia Company expedition was much better equipped than previously thought. By the end of the 2003 season, more than half a million items, from fishhooks and weaponry to glassmaking and woodworking equipment, along with the bones of game fish and assorted livestock, had been recovered and cataloged. Many are now on display at the Jamestown Rediscovery project headquarters, a clap-

"In college, I had associated archaeology with the pyramids of Egypt," says researcher William Kelso (top). "So the thought of digging up American history with my own hands was very appealing." At right: Excavating a 17th-century well.

board Colonial-style building a few hundred yards from the fort. "All of this flies in the face of conventional wisdom, which says that the colonists were underfunded and ill-equipped, that they didn't have the means to survive, let alone prosper," says Kelso. "What we have found here suggests that just isn't the case."

In a climate-controlled room down the hall from Kelso's sparsely decorated office, Beverly Straube, the project's curator, sorts and analyzes the detritus of everyday life and death in the Virginia Colony. Some of the more significant artifacts are nestled in shallow open boxes, labeled and carefully arranged on long tables according to where the items were found. From one box, Straube picks up a broken ceramic piece with drops of shiny white "frosting" attached to its surface. "It's part of a crucible," she explains. "And this," she says, pointing to the white substance, "is molten glass. We know from John Smith's records that German glassmakers were brought in to manufacture glass to sell back in London. Here we have evidence of the glassmakers at work in the Jamestown fort." From another box, she takes a broken ceramic piece with a cut-out hole and an ear-like protrusion. She compares it with a sketch of a ceramic oven, about the size of a toaster, used by 16th-century craftsmen to make clay tobacco pipes. Nearby are fragments of a glass alembic (a domed vessel used in distilling) and a ceramic boiling vessel, known as a cucurbit, for refining precious metals. "These artifacts tell us that the colonists weren't just sitting around," Straube says. "When they were healthy enough to work, this was an industrious place."

In another room, Straube opens a drawer and pulls out a pitted piece of iron—round, with a point protruding from its center. It is a buckler, she explains, a shield used in hand-to-hand combat. It was found in a trench surrounding the fort's east bulwark. By 1607, she says, bucklers were considered largely obsolete as tools of war in Europe—which would seem to fit the traditional view that the Jamestown expedition was provisioned with castoff weapons and equipment. "But we believe these were deliberately chosen," Straube says, "because the settlers knew they were more likely to face guerrilla-type combat against Indian axes and arrows than a conventional war against Spanish firearms. So the buckler would have come in handy."

In the cellar of what had been a mud-walled building that extends outward from the eastern palisade wall, archaeologists have found pottery shards, broken dishes and tobacco pipes, food remains, musket balls, buttons and coins. The cellar had been filled with trash, probably in 1610 during a massive cleanup of the site ordered by the newly appointed governor, Lord de la Warre, who arrived at Jamestown just in time to prevent the starving colonists from abandoning the settlement and returning to England. Establishing the date helps show that the cellar's contents, which included the glassmaking and distilling equipment on display at the APVA headquarters, dated to the colony's critical first years. It is from such early artifacts that Kelso and Straube are revising the colony's history.

Sifting through cellars and trenches in and around the fort, Kelso and his team recently uncovered a surprisingly large quantity of Indian pottery, arrowheads and other items. These suggest that the colonists had extensive dealings with the Natives. In one cellar, an Indian cooking pot containing pieces of turtle shell was found next to a large glass bead that the English used in trade with the Indians. "Here we believe we have evidence of an Indian woman, inside the fort, cooking for an English gentleman," Straube says. While such arrangements may have been rare, Kelso adds, the find strongly implies that Natives occasionally were present inside the fort for peaceful purposes and may even have cohabited with the Englishmen before English women arrived in significant numbers in 1620.

What is known from Virginia Company papers is that the colonists were instructed to cultivate a close relationship with the Indians. Both documentary and archaeological records confirm that English copper and glass goods were exchanged for Indian corn and other foods, initially at least. But the relationship didn't last long, and the consequences for both the English and the Indians proved deadly.

AS GRIM AS THE FIRST YEAR was at Jamestown, the darkest days for the colonists were yet to come. In 1608, the settlement was resupplied twice with new recruits and fresh provisions from London. But when nearly 400 new immigrants arrived aboard seven English supply ships in August 1609, they found the colonists struggling to survive. In September, the former president of the colony, John Ratcliffe, led a group of 50 men up the Pamunkey River to meet with Wahunsunacock—better known as Chief Powhatan, the powerful leader of the Powhatan Indians—to bargain for food. The colonists were ambushed, Ratcliffe was taken prisoner and tortured to death, and only 16 of his men made it back to the fort alive (and empty handed).

That fall and winter in Jamestown would be remembered as "the starving time." Out of food, the colonists grew sick and weak. Few had the strength to venture from their mud-and-timber barracks to hunt, fish or forage for edible plants or potable water. Those who did risked being picked off by Indians waiting outside the fort for nature to take its course. Desperate, the survivors ate their dogs and horses, then rats and other vermin, and eventually the corpses of their comrades. By spring, only 60 colonists were still alive, down from 500 the previous fall.

The starving time is represented by debris found in a barracks cellar—the bones of a horse bearing butchery marks, and the skeletal remains of a black rat, a dog and a cat. To the west of the fort, a potters' field of hastily dug graves—some as early as 1610—contained 72 settlers, some of the bodies piled haphazardly on top of others in 63 separate burials.

In the conventional view of Jamestown, the horror of the starving time dramatizes the fatal flaws in the planning and conduct of the settlement. Why, after three growing seasons, were the men of Jamestown still unable or unwilling to sustain themselves? History's judgment, once again, has been to

CONTINUED ON PAGE 53

Excavations have turned up half a million artifacts, which curator Beverly Straube stores in a climate-controlled room on-site.

blame "gentlemen" colonists who were more interested in pursuing profits than in tilling the soil. While the Virginia "woods rustled with game and the river flopped with fish," according to *The American Pageant,* a 1956 history textbook, the "soft-handed English gentlemen . . . wasted valuable time seeking gold when they should have been hoeing corn." They were "spurred to their frantic search" by greedy company directors in London who "threatened to abandon the colonists if they did not strike it rich."

But Kelso and Straube are convinced the fate of the colony was beyond the control of either the settlers or their London backers. According to a landmark 1998 climate study, Jamestown was founded at the height of a previously undocumented drought—the worst seven-year dry spell in nearly 800 years. The conclusion was based on a tree-ring analysis of cypress trees in the region showing that their growth was severely stunted between 1606 and 1612. The study's authors say a major drought would have dried up fresh-water supplies and devastated corn crops on which both the colonists and the Indians depended. It also would have aggravated relations with the Powhatans, who found themselves competing with the English for a dwindling food supply. In fact, the period coincides perfectly with bloody battles between the Indians and the English. Relations improved when the drought subsided.

The drought theory makes new sense of written comments by Smith and others, often overlooked by historians. In 1608, for example, Smith records an unsuccessful attempt to trade goods for corn with the Indians. "(Their corne being that year bad) they complained extreamly of their owne wants," Smith wrote. On another occasion, an Indian leader appealed to him "to pray to my God for raine, for their Gods would not send any." Historians have long assumed that the Powhatans were trying to mislead the colonists in order to conserve their own food supplies. But now, says archaeologist Dennis Blanton, a co-author of the tree-ring study, "for the first time it becomes clear that Indian reports of food shortages were not deceptive strategies but probably true appraisals of the strain placed on them from feeding two populations in the midst of drought."

Blanton and his colleagues conclude that the Jamestown colonists probably have been unfairly criticized "for poor planning, poor support, and a startling indifference to their own subsistence." The Jamestown settlers "had the monumental bad luck to arrive in April 1607," the authors wrote. "Even the best planned and supported colony would have been supremely challenged" under such conditions.

KELSO AND HIS CO-WORKERS are hardly the first archaeologists to probe the settlement. In 1893, the APVA acquired 22.5 acres of Jamestown Island, most of which had become farmland. In 1901, the U.S. Army Corps of Engineers constructed a sea wall to protect the site from further river erosion; a few graves and the statehouse at the settlement's western end were excavated at the time as well. In the 1950s, National Park Service archaeologists found footings and foundations of 17th-century structures east of the fort and hundreds of artifacts, though they couldn't locate the fort itself; since the 1800s it was widely assumed to lie underwater.

Today, the site of the original colonial settlement is largely given over to archaeological research, with few visual links to the past. Kelso and a full-time staff of ten work almost year-round, and they're assisted by some 20 student workers during the summer. Tourists wander the grassy site snapping pictures of Kelso's team toiling behind protective fences. Bronze statues of Smith and Pocahontas stand along the James River. There's a gift shop and a restored 17th-century church. And a $5 million "archaearium"—a 7,500-square-foot educational building that will house many of the colonial artifacts—is to be completed for the 2007 quadricentennial.

The surge in research at the original Jamestown can be traced to 1994, when the APVA, anticipating the colony's 400th anniversary, launched a ten-year hunt for physical evidence of Jamestown's origins and hired Kelso, who had excavated 17th-century sites near Williamsburg and was then conducting historical research at Monticello.

Kelso is unmistakably pleased with the revisionist spin his findings have given to the Jamestown saga. Yet rewriting history, he says, was not what he had in mind when he began the work. "I simply wanted to get the rest of the story," he says. Most of what is known of Jamestown's grim early years, he notes, comes from the writings of Smith—clearly the most prolific of the colony's chroniclers—and a handful of his compatriots, along with a few sketchy records from the Virginia Company in London. Such documents, Kelso says, are a "deliberate record" and often are "written with a slant favorable to the writer." Smith's journal, for example, frequently depicts many of his fellow colonists as shiftless and inept. But Smith's journal "is obviously slanted," says Kelso. "He comes out the star in his own movie."

An example is the tale of Smith's rescue by the Indian princess Pocahontas, which Smith first related in his writings in 1624, some 17 years after the incident. Because the story was never mentioned in his earlier writings, some historians now dismiss it as legend—though Pocahontas did exist.

Not that Jamestown's archaeological evidence is beyond question. Some archaeologists argue that it's nearly impossible to date Jamestown's artifacts or differentiate the founding colonists' debris from what later arrivals left behind. Retired Virginia archaeologist Ivor Noël Hume, the former director of archaeology at nearby Colonial Williamsburg, notes that the fort was occupied until the 1620s and was rebuilt several times. "It's hard to pin down what the original settlers brought with them and what came later," he says.

But Kelso and Straube say they can accurately date most of the artifacts and draw reasonable conclusions as to when certain structures were built and abandoned. "If we find a piece of broken pottery in a trash pit, and another piece of the same vessel in a nearby well," Straube explains, "we know these two structures existed at the same time." Moreover, she says, the appearance of certain imported items from Portugal, Spain or Germany indicate a period after the Virginia Company lost its charter in 1624 and the colony's management was turned over to England's Crown. "It's really a different Jamestown in the later period," she says.

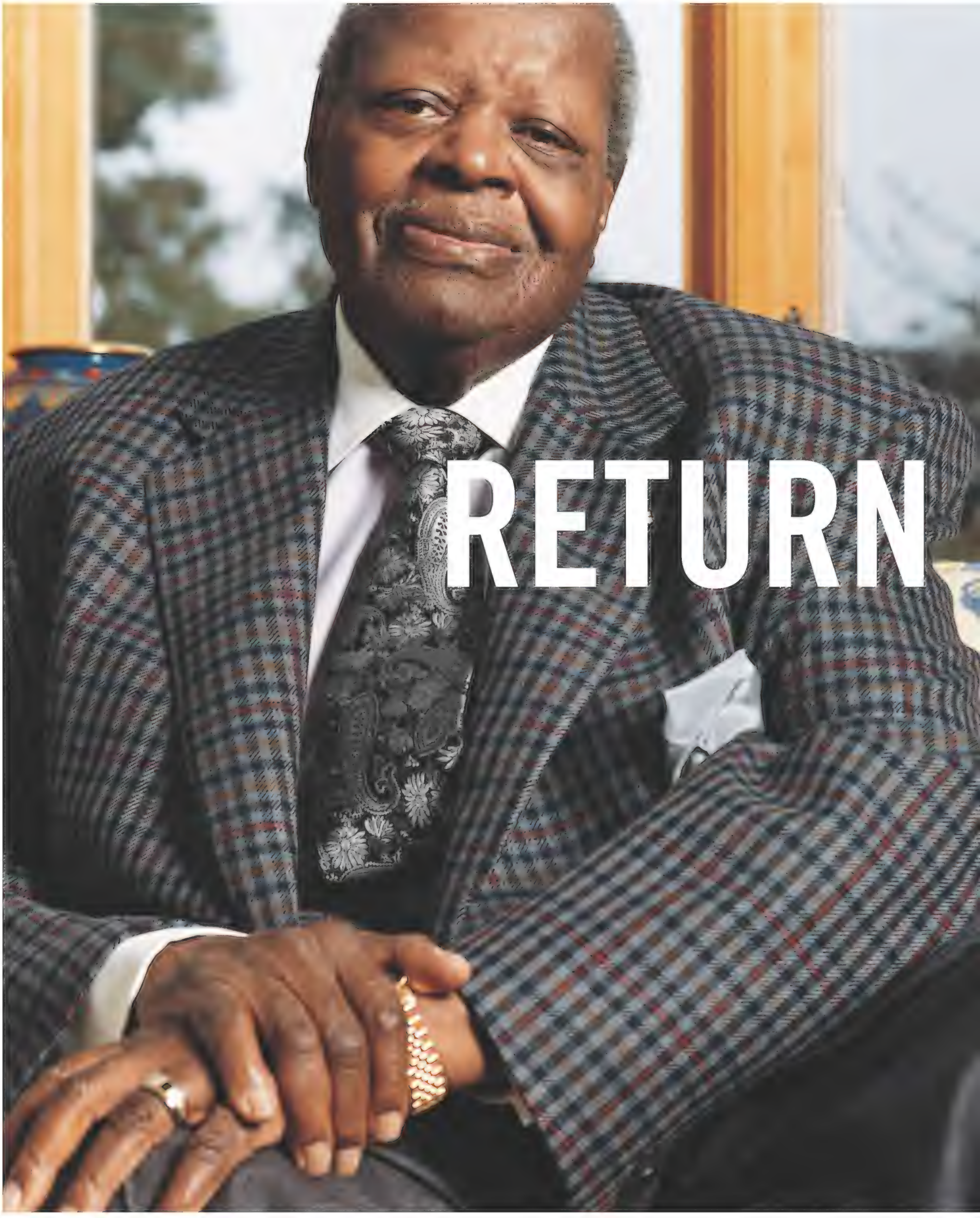
Some historians still have their doubts. "What they are finding may require some adjustment to the views of historians relying solely on documents," Yale's Morgan concedes. But the reputation of Jamestown as a failure will be a hard one to shake, he adds: "It will take a lot more than a half million artifacts to show that the Virginia Company learned from its mistakes and made a go of it in the colonies."

Kelso is convinced that much more colonial history lies buried in the island's soil. During the 2004 digging season, excavators uncovered the footprint of a long and narrow building inside the fort. The presence of unusually fancy glassware and pieces of Chinese porcelain buried inside suggests to Straube that it was a place of high-style dining and entertaining, perhaps the governor's home, which written records indicate was built in 1611. In the cellar of another structure, a student volunteer uncovered wine bottles, intact but empty, that are believed to date to the late 1600s, when Jamestown was prospering as a tobacco and trade center.

"Were there gentlemen at Jamestown?" says Kelso. "Of course. And some of them were lazy and incompetent. But not all. The proof of the matter is that the settlement survived, and it survived because people persisted and sacrificed." And what began as an English settlement gradually evolved into something different, something new. "You look up and down the river as the settlement expanded and you find it is not like England. The houses are different—the towns, the agriculture, the commerce. They were really laying the roots of American society." Despite the agony, the tragedy, and all of the missteps, says Kelso, "this is where modern America began."

Clockwise from top left: Burgonet helmets were typical headgear for cavalry and infantry; a breastplate was specially modified with a shoulder plate for muskets. Beginning in 1611, soldiers were required to wear armor whenever outside the fort. The rule was a success, according to one colonist's diary: "Indians not being acquainted . . . to encounter with men in Armor, much wondered thereat especially that they did not see any of our men fall as they had done in other conflicts." Other artifacts help flesh out daily life. Shoe leather was found in a well; a fancifully decorated tool helped early colonists clean their ears and pick their teeth. Glass wine bottles found in a cellar date to the colony's later years.

P. 55 TOP: ASSOCIATION FOR THE PRESERVATION OF VIRGINIA ANTIQUITIES PRESERVATION VIRGINIA (2)



RETURN

OF A VIRTUOSO

Following a debilitating stroke, the incomparable jazz pianist Oscar Peterson had to start over

BY MARYA HORNBACHER

PORTRAIT BY RUSSELL MONK

HE WAS PLAYING "Blues Etude" when it happened. It was the first show of the night at New York City's Blue Note club. May 1993. Oscar Peterson, then 67 and one of the greatest jazz pianists ever, found his left hand flubbing the boogie-woogie passages that climax the arrangement. He brushed the difficulty off, completed the set and went backstage with the rest of the trio.

The bassist, Ray Brown, who'd been playing with Peterson off and on for four decades, took him aside and asked if something was wrong. Peterson said it was nothing. Still, he felt dizzy, and he found his dressing room going in and out of focus. The second set was worse. He fumbled again, his left hand stiff and tingling, and now he couldn't play the notes he'd managed just an hour before. For the first time in an international career that had begun with a surprise debut at Carnegie Hall at age 24, Peterson—known for such spectacular shows of keyboard mastery that Duke Ellington called him the "maharajah of the piano"—struggled to play.

After Peterson had returned to his home in the Toronto suburb of Mississauga, Ontario, he saw a doctor and learned that he had had a stroke, which had rendered his left side nearly immobile. It seemed that he would never perform again, and he says he soon became depressed. His ailment was all the more poignant given that his greatest asset, in addition to his astonishing dexterity, was his ability to do things with his left hand that most pianists could only dream of. Once, while performing, he reportedly leaned over and lit a cigarette for a woman in the front row with his right hand while his left scampered up and down the ivories without missing a beat.

Few jazz pianists have been as widely celebrated. A native of Montreal, Peterson received his nation's highest cul-

Peterson (at home in Mississauga, Canada, last year) "can play so hot and so deep and earthy it just shakes you," says guitarist Herb Ellis (with Peterson and Ray Brown c. 1955).

tural honor, the Order of Canada, in 1972. He was inducted into the International Academy of Jazz Hall of Fame in 1996. Though he dropped out of high school (to pursue music), he has been granted 13 honorary doctorates and, in 1991, was appointed Chancellor of York University in Toronto. He has garnered 11 Grammy nominations and seven wins, including a lifetime achievement award, and he has won more *Downbeat* magazine popularity polls than any other pianist.

His swinging, precise, clear-as-spring-water virtuosity has been recorded on upwards of 400 albums, and the people he has played with over the decades—from Louis Armstrong to Charlie Parker to Ella Fitzgerald—are jazz immortals. Peterson "came in as a young man when the great masters were still active," says Dan Morgenstern, director of the Institute of Jazz Studies at Rutgers University. "He's a living link to what some might consider the golden age of jazz. It's not that there aren't many wonderful young jazz musicians around today, and the music is still very much alive. But in every art form, there are times when it reaches a peak, and that was the case with jazz at that particular time. And Oscar got in on that and he contributed to it."

Oscar Peterson (seated, with, from left, his brother Charles and his father, mother and sisters May and Daisy c. 1940s) says his father "decided he was going to raise a musical family . . . without any reference to the family's views, certainly not mine." Oscar says his brother Fred, who died at 16, was the superior pianist. Daisy was a noted piano teacher.

"I said, 'That's got to be two people playing!' I didn't

"He has the most prodigious facility of anyone I've ever heard in jazz," says Gene Lees, author of a 1988 biography of Peterson, *The Will to Swing*. "It continued to evolve, and became more controlled and subtle—until he had his stroke."

BORN IN 1925, Oscar Emmanuel Peterson was one of five children of Daniel and Olive Peterson. His father, a train porter and avid classical music fan, was from the Virgin Islands, and his mother, a homemaker who'd also worked as a maid, from the British West Indies. Oscar began playing the piano at age 5 and the trumpet the next year. His older sister Daisy, who would become a renowned piano teacher, worked with him in his early years. But it was his brother Fred, a deeply gifted pianist six years older than Oscar, who introduced him to jazz. The family was devastated when Fred died of tuberculosis at age 16. To this day Peterson insists that Fred was one of the most important influences in his musical life, and that if Fred had lived, he would have been the famous jazz pianist and Oscar would have settled for being his manager.

During their high-school years, Oscar and Daisy studied with Paul de Marky, a noted music teacher who'd apprenticed with a student of the 19th-century Hungarian composer and pianist Franz Liszt. The link seems significant: Liszt, like Peterson, was sometimes criticized for composing music that only he could play because of his agility and sheer technical genius. Peterson, under de Marky's tutelage, began to find his crisply swinging style.

Peterson was still a teenager when he had what he calls his first "bruising" with Art Tatum, considered by many the father of jazz piano. "I was getting perhaps a little full of myself, you know, playing for the girls at school, thinking I was quite something," Peterson recalls. "And my father returned from one of his trips with a record. He said, 'You think you're so great. Why don't you put it on?' So I did. And of course I was just about flattened. I said, 'That's got to be two people playing!' But of course it wasn't, it was just Tatum. I swear, I didn't play piano for two months afterward, I was so intimidated." Only a few years later, Art Tatum himself would hear Peterson play live with one of his early trios. After the show, he buttonholed him. "It's not your time yet," the great man said. "It's my time. You're next."

In the summer of 1949, as the story goes, Norman Granz—one of jazz's most important producers—was in a Montreal taxicab headed for the airport when he heard Peterson's trio playing live on the radio from the city's Alberta Lounge. He told the cabbie to turn around and drive him to the club. Granz then invited Peterson to appear at a Carnegie Hall performance by his Jazz at the Philharmonic all-star

MARYA HORNBACHER is the author of the 1998 memoir Wasted *and the novel* The Center of Winter, *to be published in February.*

P. 57 MICHAEL OCHS ARCHIVE

band. Peterson accepted. As a Canadian, he didn't have a work visa, so Granz planted him in the audience, then brought him onstage unannounced. Peterson stunned the audience playing "Tenderly" accompanied only by Ray Brown on bass. They received a standing ovation.

News of the dazzling debut traveled quickly. Peterson had "stopped" the concert "dead cold in its tracks," *Downbeat* reported, adding that he "displayed a flashy right hand" and "scared some of the local modern minions by playing bop ideas in his *left* hand, which is distinctly not the common practice." Peterson began touring with Granz's band, and he soon formed his renowned trios, featuring Ray Brown on bass and first Barney Kessel and then Herb Ellis on guitar. In 1959, Peterson and Brown were joined by drummer Ed Thigpen. Which of the Peterson-led combos was the greatest is a matter of spirited musicological debate. Peterson himself says he doesn't have a favorite group or even album, though he guesses that his 1956 *At the Stratford Shakespearean Festival*, with Ellis and Brown, is his bestselling recording.

PETERSON, NOW 79, is serene, soft-spoken and wry. When he chuckles, which he frequently does, his whole body curves inward, his shoulders shake and a huge grin explodes on his face. He is elaborately courteous, in the manner of men and women of an earlier era, and full of memories. "Let me tell you a story about Dizzy Gillespie," he says, recalling his years on the road in the 1950s. "Dizzy was wonderful. What a joy. We loved each other. Dizzy's way of telling me he enjoyed what I did was, he'd come backstage and say, 'You know what? You're crazy.' Anyway, we were traveling down South, in some of the bigoted areas. So it was two o'clock in the morning, or something like that, and we pulled up to one of those roadside diners. And I looked, and there was the famous sign: No Negroes. And the deal was, we all had duos or trios of friendship, so one of the Caucasian cats would say, 'What do you want me to get you?' And they'd go in, and they wouldn't eat in there, they'd order and come back on the bus and eat with us. But Dizzy gets up and walks off the bus and goes in there. And we're all saying, 'Oh my God, that's the last we'll see of him.' And he sits down at the counter—we could see this whole thing through the window. And the waitress goes over to him. And she says to him, 'I'm sorry, sir, but we don't serve Negroes in here.' And Dizzy says, 'I don't blame you, I don't eat 'em. I'll have a steak.' That was Dizzy exactly. And do you know what? He got served."

In 1965, Peterson recorded *Oscar Peterson Sings Nat King Cole.* "That album was made under duress," Peterson recalls. "Norman Granz talked me into doing it. And I'll tell you a story about that. Nat Cole came in to hear me in New York one night. And he came up and said to me, 'Look, I'll make you a bargain. I won't play the piano if you won't sing.'" Peterson cracks himself up. "I love Nat so much. I learned so much from him."

play for two months afterward, I was so intimidated."

CANADIAN PACIFIC ARCHIVES (2)

Over the years, the criticism that would dog Peterson more than any other was that his virtuosity, the source of his greatness, masked a lack of true feeling. A reviewer in the French magazine *Le Jazz Hot* wrote in 1969 that Peterson "has all the requisites of one of the great jazz musicians. . . . Save that élan, that poesy, . . . that profound sense of the blues, all that is difficult to define but makes the grandeur of an Armstrong, a Tatum, a Bud Powell, a Parker, a Coltrane or a Cecil Taylor."

Peterson fans and many fellow musicians insist it's a bad rap. "Oscar plays so cleanly that nobody can believe he's a jazz guy," says jazz pianist Jon Weber. "Maybe the expectation is that jazz is going to be sloppy or clumsy, but it's not. There are going to be times when a down-and-dirty blues is exactly what you've gotta do, like this—" he pauses and lays down a riff on his piano that heats up the phone lines—"and it might sound sloppy to the uninitiated. But Oscar plays with such flawless technique that it makes people think, 'Well, it's too clean to be jazz.' What has a guy got to do to convince them that he's playing with emotion? From the first four bars, I hear his heart and soul in every note."

Peterson was in his 20s (with Austin Roberts, bass, and Clarence Jones, drums, c. 1947) when producer Norman Granz heard him on the radio and rushed to sign him up.

"If you've got one finger, you've got something to say,

Morgenstern compares the criticism of Peterson's work to the complaint that Mozart's music had "too many notes." "Just virtuoso displays of technical facility are relatively shallow and meaningless," Morgenstern says. "But with Oscar, it's not like that. He obviously has such a great command of the instrument that he can do almost anything. The thing about Oscar is that he enjoys that so much, he has so much fun doing it. So sure, he's all over the keyboard, but there's such a zest for it, such a *joie de vivre*, that it's a joy to partake of that."

Herb Ellis once said of Peterson, "I've never played with anybody who had more depth and more emotion and feeling in his playing. He can play so hot and so deep and earthy that it just shakes you when you're playing with him. Ray and I have come off the stand just shook up. I mean, he is *heavy*."

A living link to the golden age of jazz, Peterson has played with pioneers aplenty: Clockwise from top left, with Ella Fitzgerald, trumpeter Roy Eldridge and drummer Max Roach in 1952; with Benny Carter c. 1954; with producer Norman Granz (far left) and saxophonist Flip Phillips in London in 1952; with Dizzy Gillespie (left), Clark Terry, drummer Louis Bellson and bassist Neils Pederson in Switzerland in 1975; with saxophonist Charlie Parker and Ray Brown in 1952.

In an interview, *Downbeat*'s contributing editor, John McDonough, once asked Peterson about a critic's complaint that he was a "cold machine."

"So sue me," Peterson said. "I am the kind of piano player I am. I want to address the keyboard in a certain way. I want to be able to do anything my mind tells me to do."

BETTMANN / CORBIS; METRONOME / GETTY IMAGES; HULTON ARCHIVE / GETTY IMAGES (2); MICHAEL OCHS ARCHIVE

SUMMER 1993. Peterson sits at the kitchen table in his house in Mississauga. His daughter Celine, then a toddler, sits across from him, shooting toy trucks at him across the table. He catches them with his right hand. Celine says, "No, Daddy! With the other hand! Use your other hand!"

Peterson says it was the darkest time of his life. The frustration of daily physical therapy wore on him, and when he sat down at the piano, that full sound, *his* sound, no longer filled the room. His left hand lay mostly limp on the keyboard.

Not long after he was stricken, the bassist Dave Young called Peterson and announced that he was coming over with his instrument. Peterson said, "Dave, I can't play."

"What do you mean, you can't play?"

"I can't play no more."

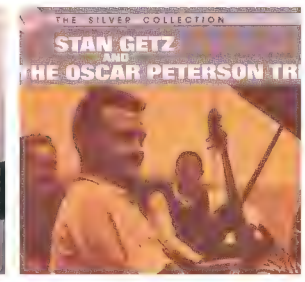
"You're gonna play. I'm coming over."

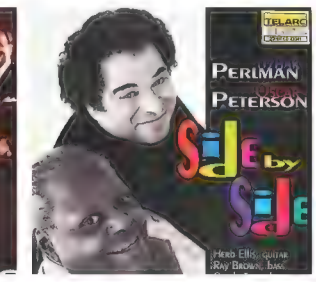
Young came over, and Peterson remembers, "he called all these tunes that required both hands. He said, 'See, there's nothing wrong with you. You should play more often.'"

Niels Pederson, his bassist, asked how he was doing. Peterson said, "Niels, I don't know if I can come up with this one."

"'Well,' he said, 'now's a hell of a time to back out. You better play, because I'm going to be running up one side of you and down the other if you don't.' And I managed to get through the concert. We went out to eat afterward, and I was sitting in the restaurant. And I felt Norman's arms around me, and he said, 'I've never been more proud of you than I am tonight.'"

PETERSON SLOWLY MAKES HIS WAY into the sunroom at the back of his house. The room is alive with afternoon light and crowded with plants and flowers. Elsewhere in the house are Peterson's wife of 18 years, Kelly, and their 13-year-old daughter, Celine. He also has six children from two of his other three marriages, and he relishes his role as father and grandfather. His family, he says, is the reason he keeps playing—that, he adds, and "the man upstairs."





so don't even go that way. We can't accept that loss."

After about 14 months of intensive physical therapy and practice, one of the world's greatest jazz pianists made his comeback debut at his daughter's elementary school. Soon he moved on to local clubs. "The piano field's very competitive," Peterson says. "And at different times, players would come to hear me, and that little gnome would tap me on the shoulder and say, 'So-and-so's out there. Are you going to miss tonight?'"

Benny Green, a pianist influenced by Peterson's work, "wouldn't accept me walking away. He said, 'If you've got one finger, you've got something to say, so don't even go that way. We can't accept that loss.' I just figured, take me as I am. If this is what I'm going to be, then this is what I'm going to be. If I couldn't express myself with whatever is left—and I'm not saying my playing is what it used to be—but if I can't express myself, I wouldn't be up there. If I can't speak to you in a discernible voice, I wouldn't bother having the conversation."

"Of course, Norman [Granz] was alive at that time, and he'd call me up every day. He'd say, 'How're you doing?' And I'd say, 'Aw, I don't know.' And he'd say, 'Don't give me that sob story. I don't want to hear it. When are you going to play?'" Granz, Peterson's manager and longtime friend, wanted to book him, and Oscar finally agreed. "I distinctly remember standing in the wings at a concert in Vienna," Peterson says. "And I had that last wave of doubt."

Peterson, who has recorded more than 400 albums, "never had a breakout hit," says *Downbeat* critic John McDonough. Still, many fans consider "Tenderly" his signature song.

He continues to tour and compose, he says, because he loves the piano. "It's such a vast instrument I play. I approach it with a very humble attitude—you know, are we going to be able to talk today? I believe that this music is a very important part of our worldly culture. I've always believed that. And because of the improvisational nature of jazz, and the emotional aspect of it, I believe it's one of the most truthful voices in the arts. I don't see myself as a legend. I think of myself as a player that has emotional moments, musically speaking, that I want to bring forward. And jazz gives me the opportunity to do that."

Downbeat's McDonough recalls seeing Peterson perform after the stroke: "I thought he was performing wonderfully. And it wasn't until the second or third concert that I happened to see that he was not using his left hand. But his right hand was working so hard, and giving so much, it just didn't occur to me that I was listening essentially to a one-handed pianist. With all the accolades that came to Peterson during his prime years, it seemed to me that even greater accolades should be afforded him, because he could do what he could do with one hand. He had skill to burn. He lost half his resources, and it's astonishing what he can still produce."

BLUEBIRD RECORDS; VERVE RECORDS (3); TELARC RECORDS (2)

These days Peterson spends most of his musical time composing, a process that was not hindered by his stroke and that is aided by his love of gadgets. He has a studio in his home, and often starts out "doodling" on keyboards hooked up to computers. "Most of my writing is spontaneous," he says. "In jazz, it comes directly from your inner feelings at that exact moment in time," he says. "I don't necessarily start out with anything. Most of it is built on one thing—emotion. And I say that not being maudlin. Inwardly, I'm thinking of something in particular, something I like or something that's getting to me. And at some point it comes out musically."

Peterson's talents as a composer, which have been largely overshadowed by his strengths as a performer, began with a dare. "My bassist Niels Pederson said, 'Why don't you write something?' I said, 'Now?' He said, 'Yeah! You're supposed to be so big and bad. Go ahead.' I figured he was getting a little uppity so I'd face this challenge. So I wrote 'The Love Ballad' for my wife." Likewise for *Canadiana Suite*, which he recorded in 1964. "That was started on a bet," he says, chuckling. "I had been messing with Ray Brown"—Peterson is a notorious practical joker, and Brown was one of his favorite victims—"I would go steal his cuff links and what have you. And he said, 'Why don't you make good use of your time instead of messing with me? Why don't you go write something?' I said, 'What do you want me to write?' I was in a very cavalier mood. He said, 'You know, Duke [Ellington] has written a "this suite" and a "that suite," why don't you go write a suite?' I said, 'OK, I'll be back.'" Peterson chuckles. "The first piece I wrote was 'Wheatland,' and I started on 'Blues of the Prairies.' And I called Ray over. He said, 'Well, when are you going to finish it?' I said, 'Ray, we gotta go to work! I would, but'—and he said, 'Well, finish the so-and-so thing. Two pieces is not a suite. Canada's a big, big country. What're you gonna do about that?'" A sweeping musical meditation on the grandeur of the Canadian landscape, *Canadiana* was hailed by one critic as a "musical journey."

SUMMER 2004. Tonight Peterson is decked out in a blue-spangled tux with satin lapels and a bow tie, cuff links the size of quarters, and blue suede shoes. The audience is on its feet the moment he rounds the corner and heads slowly, painfully, onto the stage at the legendary Birdland in New York City. Peterson nods to the cheering crowd. Gripping the Boesendorfer piano as he goes, he grins and finally settles himself before the keyboard. With bass, drums and guitar behind him, he glides into "Love Ballad." The room seems to swell with a sigh of pleasure. Here in New York, where he emerged as an entirely new force in jazz half a century before, Peterson sweeps through a set of ballads and swing, Dixieland and blues, bringing the crowd to its feet as he closes with "Sweet Georgia Brown." Backstage between sets, Peterson eats ice cream. "Whew!" he says. "Well, it got very heavy. I had a ball."

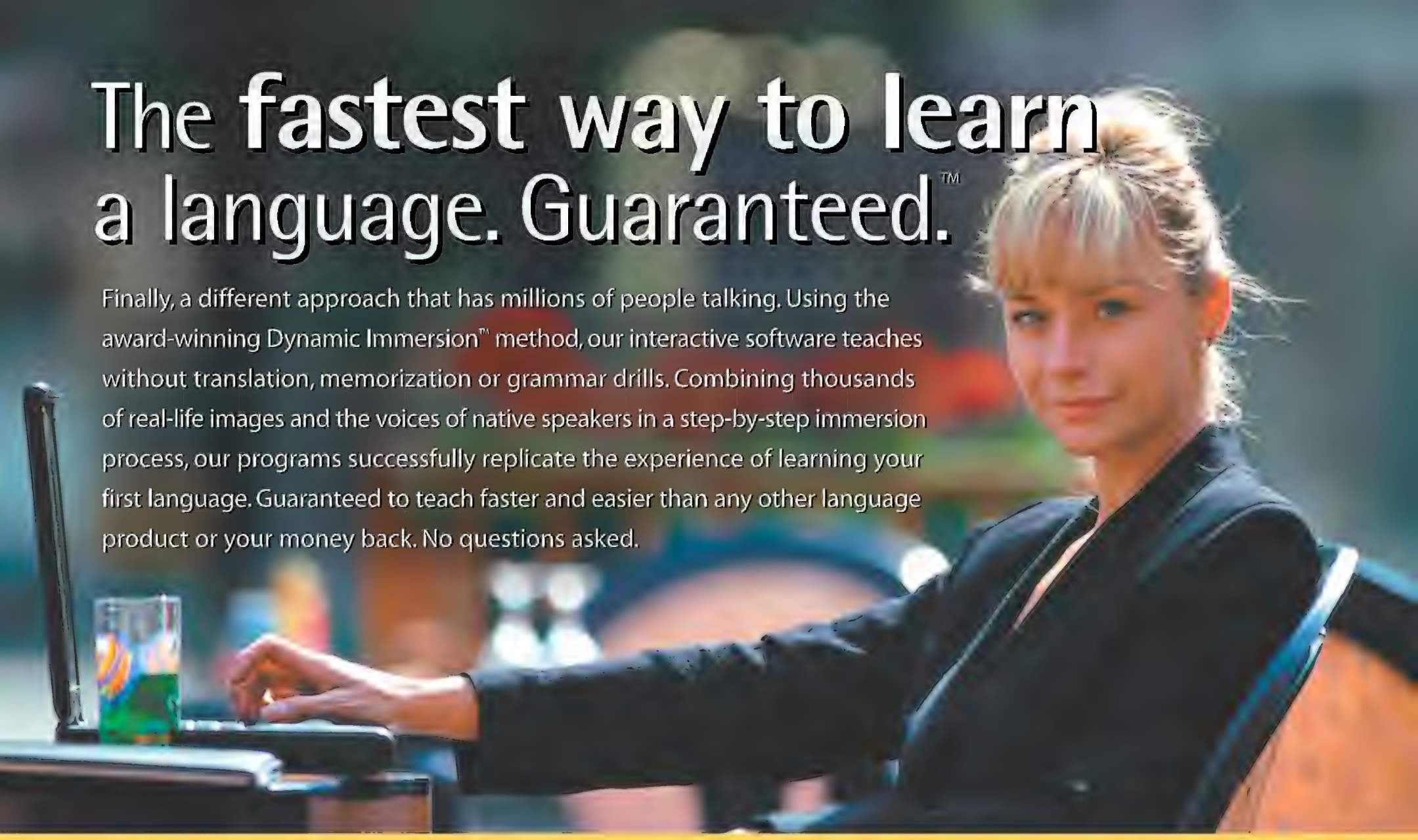
Since returning to the stage after his stroke, Peterson (at New York City's Birdland in 2004) has made up for lost dexterity in his left hand with more emotional playing.

As he makes his way onstage for his second set, Peterson grins and nods to the audience, which stands and cheers the second he rounds the corner. He settles himself onto the piano bench, shoots a glance at Niels Pederson, and the music rolls into the room like a wave: the slow, steady lick of Alvin Queen's brush on the snare, the resonant voice of the bass thrumming up from the depths, the easy, rhythmic tide of Ulf Wakenius' guitar, and then, like raindrops on water, the delicate sound of Oscar's elegant right hand on the keys. Later he is asked what he played in the second set. He chuckles, saying, "Anything I could remember."

MALCOLM LINTON

The fastest way to learn a language. Guaranteed.™

Finally, a different approach that has millions of people talking. Using the award-winning Dynamic Immersion™ method, our interactive software teaches without translation, memorization or grammar drills. Combining thousands of real-life images and the voices of native speakers in a step-by-step immersion process, our programs successfully replicate the experience of learning your first language. Guaranteed to teach faster and easier than any other language product or your money back. No questions asked.



Spanish (Latin America or Spain) **English** (US or UK) **French** **Italian** **Portuguese** **German** **Russian** **Chinese** **Japanese** **Indonesian** **Vietnamese** **Thai** **Korean** **Hindi** **Arabic** **Hebrew** **Greek** **Turkish** **Danish** **Swahili** **Polish** **Welsh** **Dutch** **Swedish** **Pashto** **Latin**

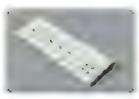
Award-winning software successfully used by U.S. State Department diplomats, Fortune 500® executives and millions of people worldwide.

Step-by-step immersion instruction in all key language skills:

Listening - The Rosetta Stone uses native speakers and everyday language to develop your understanding of the spoken language naturally and easily.

Reading - Text exercises develop your reading skills by linking written language to real-life objects, actions and ideas.

Speaking - Speech-recognition feature records, diagrams and compares your voice to the native speaker's, grading your pronunciation.



Writing - Dictation exercises evaluate your spelling, syntax and punctuation.

> **"...your program is the absolute best, bar none. I am shocked at how quickly I learn."**
>
> ***- Michael Murphy***
> ***Texas, USA***
>
> **"Stupendous...the juxtaposition of text, sound and picture was masterful. The quality of both sound and graphics was first rate."**
>
> ***- The Boston Globe***

Each fully interactive course includes:

- CD-ROM curriculum with 20 activities in each of 92 lessons
- Previews, comprehensive exercises and testing for each lesson
- Automated tutorials that "learn" where you need extra help
- Curriculum Text and 45-page User's Guide

SAVE 10%

Level 1 Program	Level 2 Program	Level 1 & 2
Regularly ~~$195.00~~	Regularly ~~$225.00~~	Regularly ~~$329.00~~
		BEST VALUE!
Your Price	**Your Price**	**Your Price**
$175.50	**$202.50**	**$296.10**

Personal Edition. Solutions for organizations also available.

Call today or buy online for a 10% discount:
RosettaStone.com/sss015
1-877-720-6934
Use promotional code sss015 when ordering.

RosettaStone®
Language Learning Success

James Boswell's SCOTLAND

The author of the *Life of Samuel Johnson* spent much of his own life trying to escape the country of his birth

BY TOM HUNTINGTON

LATE ON A SUNNY AFTERNOON last summer, I visited a deserted churchyard in Auchinleck, a drab little village surrounded by pastureland in Scotland's western district of East Ayrshire. Many of the weathered gravestones were broken or tilted. Two small buildings stood among them: the old parish church and an unpretentious mausoleum, on the side of which I found a coat of arms with the inscription *Vraye Foy*, or True Faith. Otherwise, there was nothing—no statue, no plaque, no marker—to indicate that inside lay the remains of James Boswell, the passionate Scotsman who wrote one of the greatest books of all time, the *Life of Samuel Johnson, LL.D.*

Dr. Johnson, as the brilliant 18th-century critic, author and poet was known, produced a huge body of immensely influential literature, including a dictionary that remained the gold standard of English lexicography for the better part of a century. Eccentric and witty, he was the hub of a glittering circle in London that attracted such luminaries as novelist and playwright Oliver Goldsmith, painter Sir Joshua Reynolds, the actor David Garrick and Boswell himself. Johnson was renowned for his barbed aphorisms, many of which—"Patriotism is the last refuge of a scoundrel," "No man but a blockhead ever wrote except

"I was much agitated," Boswell (opposite) recalled of meeting Johnson (above), the subject of his life's great work.

BRIDGEMAN ART LIBRARY; HOUGHTON LIBRARY, HARVARD UNIVERSITY

SCOTTISH NATIONAL PORTRAIT GALLERY, EDINBURGH, SCOTLAND / BRIDGEMAN ART LIBRARY

Boswell's insistence on recording even Johnson's indiscreet comments—"Dr. [Oliver] Goldsmith [left, with Boswell, center, and Johnson] . . . has been loose in his principles, but he is coming right"—both scandalized and delighted his contemporaries.

for money," "I am willing to love all mankind, except an American"—still circulate.

Boswell, a self-described "gentleman of ancient blood," was a lawyer and a writer who knew Johnson well for more than 20 years. He was also a kind of genius. His biography of his friend and mentor—published after Johnson's death—created a sensation. Boswell was determined "to tell the whole truth about his subject, to portray his lapses, his blemishes, and his weaknesses as well as his great qualities," says Adam Sisman, a winner of the 2001 National Book Critics Circle Award for *Boswell's Presumptuous Task: The Making of the Life of Dr. Johnson*. Nowadays we take such candor for granted, "but in Boswell's time," Sisman adds, it was "a startling innovation."

Boswell remains a lively presence on the literary scene. Hardly a week goes by, it seems, without a Boswell sighting somewhere. A *New Yorker* spoof put Boswell to work on the life of Michael Jackson. ("When a boy, he was *already* notably fond of other children, and, as you know, he maintained his fondness for them into middle age.") The *New York Times* has compared journalist Ron Suskind and biographer A. Scott Berg to Boswell and described *Wired* magazine as the "Boswell . . . for the geekerati." The word "Boswell" is even in the dictionary, defined as "one who writes with love and intimate knowledge of any subject." Two Boswell biographies have come out in the past five years, and a host of scholars, critics and other aficionados have taken to calling themselves "Boswellians." One of them, Iain Brown, manuscript curator at the National Library of Scotland, hung a portrait of Boswell in his bathroom at home.

My own fascination with Boswell began several years ago, when I bought the *Life* after reading the introduction at a bookstore. Although I've always liked big books, this one was so formidable—1,402 pages—that I decided to try Boswell's much shorter *Journal of a Tour to the Hebrides* first, as a sort of warm-up. By the time I finished that exuberant account of a ten-week holiday Boswell and Johnson spent exploring the islands off Scotland's northwestern coast in 1773, I was hooked. I plunged right into the *Life* and then tackled Boswell's other journals—13 volumes, in all.

I was intrigued by Johnson but found Boswell downright enthralling. The astute biographer turned out to be an irresistible character in his own right, a contradictory, needy and

TOM HUNTINGTON is a former editor for American History *and* Historic Traveler *magazines. He lives in central Pennsylvania.*

BETTMANN / CORBIS

sometimes infuriating man who drank too much, talked too much and preserved many of his indiscretions in writing. Among the revelations in his journals: he fathered two illegitimate children before he married, and he remained a compulsive whoremonger throughout his life. He could be a pompous snob or entertain a crowded London theater by imitating a cow. He suffered from debilitating depressions, yet in public was the life of the party. "I admire and like him beyond measure," declared 20-year-old Charlotte Ann Burney, the sister of the famous diarist Fanny Burney. "He . . . puts himself into such ridiculous postures that he is as good as a comedy." The philosopher David Hume described him as "very good-humored, very agreeable, and very mad."

One thing he was not agreeable about was Scotland. Boswell's feelings about his homeland were deeply conflicted. He abhorred what he perceived as Scotland's abject provincialism. To rid himself of his Scottish accent, he took diction classes from Thomas Sheridan, father of playwright (*The School for Scandal*) Richard Brinsley Sheridan. Yet Scotland was the place that shaped him. He spent most of his life there and often boasted "of being descended of ancestors who have had an estate for some hundreds of years."

This is why, when I finished Boswell's books, I decided to undertake a sort of literary pilgrimage. I wanted to find what remained of Boswell's Edinburgh, and see Auchinleck, the family estate recently restored from near ruin. I also wanted to visit Boswell's tomb and pay my respects to the great biographer.

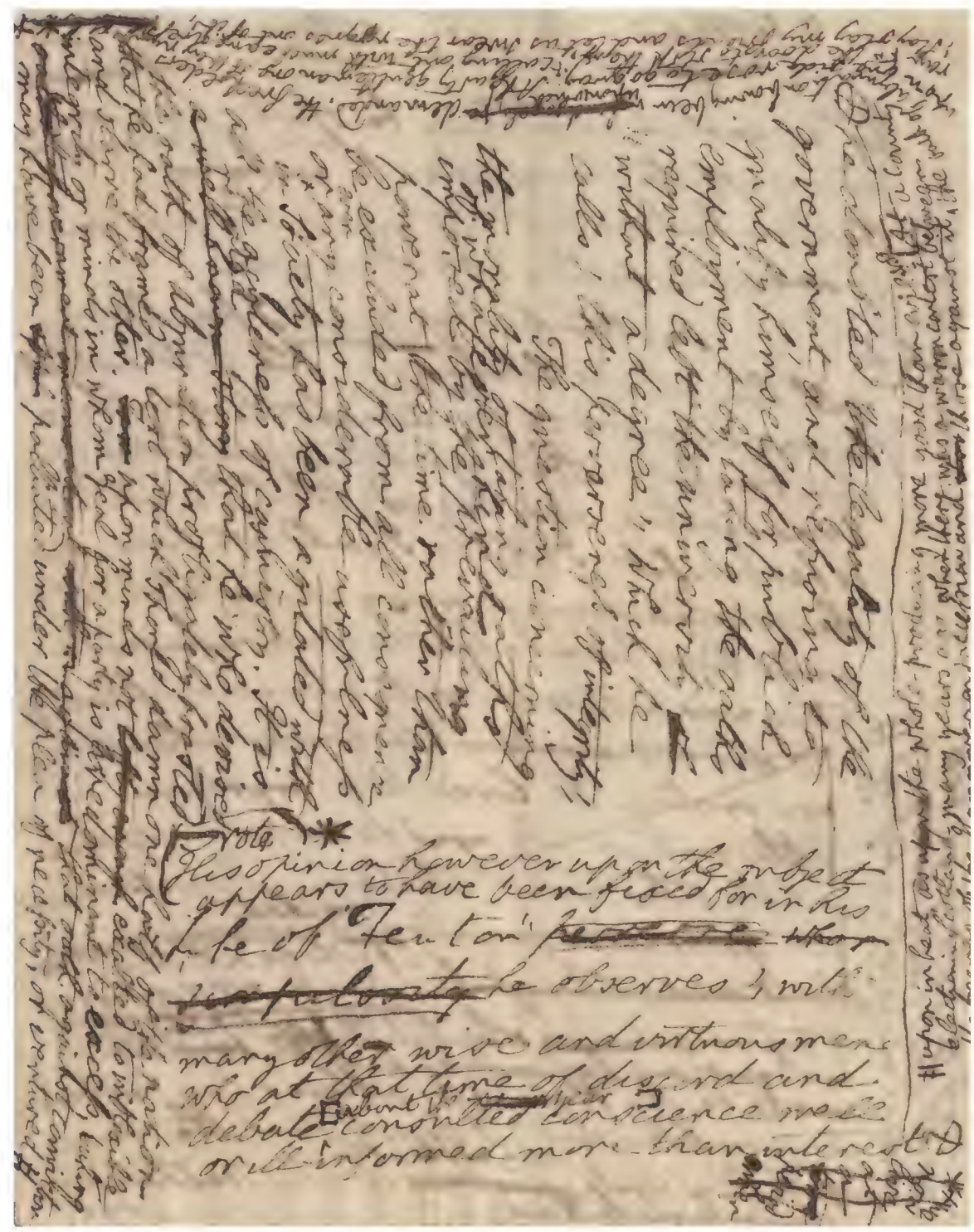
HE WAS BORN in Edinburgh in 1740. His father, Alexander, a lawyer and later a judge in Scotland's supreme civil court, was a classical scholar with an unbending sense of propriety that he expected his children to embrace. His mother, Euphemia, was passive and devout, and Boswell was very fond of her. He once recalled that "her notions were pious, visionary and scrupulous. When she was once made to go to the theater, she cried and would never go again."

Edinburgh, situated on the shore of the Firth (or bay) of Forth, 400 miles north of London, was Scotland's artistic and social center, and its capital. The nucleus of Boswell's Edinburgh was a stately avenue now known as the Royal Mile. A boulevard lined by tall, straight-faced stone buildings, it descends from Edinburgh Castle on its cliffside perch to the Palace of Holyroodhouse near the base of the weathered peak called Arthur's Seat. The castle was the fortress and palace that has dominated Edinburgh since the 16th century. Holyroodhouse had been the home of Scotland's kings and queens for two centuries until 1707, when the Act of Union made Scotland part of Great Britain.

Clustered around the Royal Mile was a tangled maze of alleys and courtyards, where many of Edinburgh's 50,000 inhabitants occupied tall tenements called "lands." The poor lived on the bottom and top floors, the more well-to-do in between. The city, ancient even then (its origins date back to at least the seventh century A.D.), was filthy and smelly. A pall of coal smoke hung over its grimy buildings, and pedestrians had to remain alert for chamber pots being emptied from windows above. The Boswell residence, the fourth floor of a tenement, was just off the Royal Mile near Parliament House, where the Scottish Parliament sat until the Act of Union abolished it.

Today Edinburgh is a bustling modern city with a population of 448,000. As my train pulled into Waverley Station, I

"You cannot imagine what labour, what vexation I have endured," Boswell wrote of his efforts on the Johnson manuscript (below). "Many a time have I thought of giving it up."



BEINECKE RARE BOOK AND MANUSCRIPT LIBRARY, YALE UNIVERSITY

craned my neck to see the castle still perched majestically on its cliffside high above the tracks. From the station a taxi took me up a steep slope to the Royal Mile. Despite the traffic and the tourist shops, the cobblestone street and its stolid, stone-faced buildings retained an unmistakable 18th-century flavor.

Boswell's birthplace burned down long ago, but other landmarks remain. I visited Parliament House, opened in 1639 and still the seat for the country's supreme civil court. The exterior was redone in the 1800s, but inside the lofty Parliament Hall, I watched advocates in black gowns and white wigs pace up and down as they talked with clients beneath a magnificent arched-timber ceiling, just as they did in Boswell's day. He often pleaded for his own clients in this hall; on many occasions the presiding judge was his father. Across the square from Parliament House, I admired the High Kirk of St. Giles, a massive, brooding presence capped by buttresses that form a gothic crown. This had been Boswell's church, one he connected with his pious mother as well as "the dreary terrors of hell."

The Boswells stayed in Edinburgh when the court was in session. In the spring and summer, they lived at their country estate 60 miles away. Auchinleck, a 20,000-acre holdover from feudal times, also provided homes for about 100 tenant farmers. Named after a previous owner, it had been in the Boswell family since 1504. Young James enjoyed riding with his father, planting trees and playing with the gardener's daughter, for whom he developed a mad passion. "Auchinleck is a most sweet, romantic Place," he wrote to a friend. "There is a vast deal of Wood and Water, fine retired shady walks, and every thing that can render the Countrey agreable to contemplative minds."

After Alexander Boswell became a judge at 46, earning the honorary title Lord Auchinleck, he built a fancy new home at his estate. Above the main entrance, he inscribed a quote from Horace: "What you seek is here in this remote place; if you can only keep a balanced disposition"—words he may have meant for his increasingly wayward eldest son.

Early on, James had served notice that he was not cut out to follow in his father's strait-laced footsteps. Scots are well known for being torn between dour conformity and impetuous rebelliousness, a contradiction emphatically personified by Boswell father and son. When James was 18, he developed a passion for the theater and fell for an actress a good ten years older. After Lord Auchinleck banished him to the University of Glasgow, Boswell, still under the spell of his Catholic mistress, decided to convert—tantamount to career suicide in Presbyterian Scotland—and ran away to Lon-

Despite paternal disapproval, Boswell married his cousin Margaret (above) in 1769. But he bowed to Lord Auchinleck's insistence that he practice law. For 17 years the son argued cases in Edinburgh's Parliament Hall, often before his father, a high court judge.

HOUGHTON LIBRARY, HARVARD UNIVERSITY; KATE BROOKS / POLARIS

"Mr. Johnson and I walked arm-in-arm up the High Street, to my house. . . . It was a dusky night: I could not prevent his being assailed by the evening effluvia of Edinburgh," Boswell wrote with typical pride and distaste for his native city on a 1773 visit.

KATE BROOKS / POLARIS

don. There he lost interest in Catholicism, caught a venereal disease and decided he wanted to be a soldier.

Lord Auchinleck fetched his son home, and there they made a deal: Boswell could seek a military commission, but first he had to study law. After chafing for two years under his father's oppressive supervision, Boswell returned to London in 1762, intending to fulfill his military dreams. A bookseller there introduced him to Samuel Johnson, then 53 and already a formidable literary figure, who made no secret of his contempt for Scots. "Indeed I come from Scotland but I cannot help it," Boswell stammered. To which Johnson growled: "That, I find, is what a very great many of your countrymen can not help."

It was a rocky start to what would eventually become the most famous friendship in English letters. Irma Lustig, who edited two volumes of Boswell's journals for Yale University Press, believes Lord Auchinleck's harshness created in his son "an insatiable need for attention and approval," and in Johnson, almost 32 years his senior, Boswell found an answer to that need. When Boswell "opened his heart," as biographer Frederick Pottle puts it, and told Johnson the story of his life, Johnson was charmed.

Lord Auchinleck was anything but charmed. He threatened to sell Auchinleck if James didn't settle down, "from the principle that it is better to snuff a candle out than leave it to stink in a socket." Knuckling under, Boswell went to Holland to continue studying law, then embarked on a postgrad grand tour of the Continent, determined to meet the leading men of his day. Though he failed to obtain an audience with Frederick the Great of Prussia, in Switzerland the brash young Scot wangled an invitation to visit philosopher Jean Jacques Rousseau, and in France he engaged Voltaire in a debate about religion. "For a . . . time there was a fair opposition between Voltaire and Boswell," he noted with satisfaction.

While in Rome, Boswell posed for a painting by George Willison, which I found in Edinburgh's National Portrait Gallery. There he was at age 24, round-faced with slight circles under his eyes and the faint suggestion of a smile on his plump lips. He wore a dandyish scarlet-and-yellow waistcoat beneath a green, fur-trimmed coat; lace peeked out from his cuffs. Above him, an owl perched absurdly on a branch. Somehow the painter captured the mixture of silliness and self-importance that made Boswell so engaging.

On the Mediterranean island of Corsica, Boswell got to know Pasquale Paoli, the charismatic patriot leading an insurgency against the Genoese, who then ruled the island. In Paris he learned of his mother's death and departed for Scotland (en route, Boswell noted in his journal, he and Rousseau's mistress had sex 13 times in 11 days). His first important book, *An Account of Corsica* (1768), celebrated Paoli.

To Britons of the day, Corsica was an exotic and romantic destination, and Boswell's breezy travelogue made him a minor celebrity known as "Corsica Boswell." Nevertheless, he kept his word to his father and began practicing law. "[He] was a professional writer," notes Irma Lustig, "but he was not, like Johnson, a writer by profession."

After entertaining a number of matrimonial schemes involving wealthy women, Boswell again infuriated his father by marrying a poor cousin, Margaret Montgomerie, who was two years older. The couple rented an apartment from the philosopher David Hume at James's Court, a fashionable Edinburgh address just off the Royal Mile.

As it happened, I too stayed in James's Court, at a small hotel. On one of the court's three arched entrances, I saw a plaque green with age noting the connection with Boswell, Johnson and Hume. The building where James and Margaret lived was destroyed by fire in 1857, but others from Boswell's era still stand, tall, gray and unadorned.

Johnson stayed with the Boswells after he and James returned from the Hebrides; to Margaret, the ungainly Londoner was the houseguest from hell. "The truth is, that his irregular hours and uncouth habits, such as turning the candles with their heads downwards, when they did not burn bright enough, and letting the wax drop upon the carpet, could not be but disagreeable to a lady," Boswell conceded. She also complained about Johnson's influence over her husband. "I have seen many a bear led by a man," she said in exasperation, "but I never before saw a man led by a bear."

During the two decades they would know each other, Boswell and Johnson actually spent little more than a year's time together; their friendship was conducted largely from afar. Even so, the older man became the central figure in his young admirer's life, a "Guide, Philosopher, and Friend," as Boswell more than once put it. "Be Johnson," he exhorted himself. Though reconciled, for the time being at least, to living in Edinburgh, he tried to visit London for several weeks each spring. "Come to me, my dear Bozzy," Johnson wrote, "and let us be as happy as we can."

On Boswell's visits, the two men socialized in taverns, in Johnson's rooms and dining with friends. They discussed topics from literature and politics to religion and gossip, and Boswell took care to preserve the conversations in his journals. One day in 1772 they spoke of marriage, "whether there is any beauty independent of utility," why people swear, "the proper use of riches," public amusements, politics ancient and modern, and various literary topics. Most important perhaps to Boswell was this advice from Johnson: "[N]obody can write the life of a man, but those who have eat and drunk and lived in social intercourse with him."

There were occasions for even more talk after Boswell

While staying at his father's newly completed Auchinleck House (left) in 1762, Boswell sought relief from depression by shaving his head. "It was agreeable at first by letting the heat of my brain evaporate, . . . but I am obliged to wear my Nightcap."

was admitted to the Club, a prestigious group of intellectual heavyweights who met for dinner and gossip every other Friday. Boswell had worried about being blackballed, but Johnson watched out for him. "Sir, they knew that if they refused you, they'd probably never have got in another. I'd have kept them all out," he said. Club meetings meant evenings of scintillating conversation with the cream of Britain's thinkers—historian Edward Gibbon, naturalist Joseph Banks, social philospher Adam Smith and Richard Brinsley Sheridan all eventually became members.

The friendship had its rough patches. At times, Boswell felt the lash of Johnson's temper. After one stinging rebuke, Boswell likened himself to "the man who had put his head into the lion's mouth a great many times with perfect safety, but at last had it bit off." Another outburst wounded Boswell so deeply he avoided Johnson for a week. The two men finally reconciled at a dinner. "We were instantly as cordial again as ever," Boswell said.

He saved more than a hundred letters from Johnson and quoted them extensively in the *Life*, but their correspondence was erratic. Months might pass in silence, until Boswell roused himself from one of his depressions. Sometimes he requested advice—about his black moods, about his law cases, about his father. Johnson provided thoughtful, penetrating answers, even though the younger man could be every bit as exasperating on paper as he sometimes was in person. On one occasion, Boswell childishly stopped writing just to see how long it would take Johnson to write to him. Other times, he would fret, worried that Johnson was angry. "I consider your friendship as a possession, which I intend to hold till you take it from me, and to lament if ever by my fault I should lose it," Johnson reassured him.

There was never any need to doubt Johnson's affection; it was genuine. "Boswell is a man who I believe never left a house without leaving a wish for his return," he once said. Among other things, the two were bound by melancholy. Johnson had a morbid fear of madness and he, too, fought depression, while Boswell analyzed his own precarious mental health to the point of obsession. Once, after watching a moth burn in a candle's flame, Johnson said, "That creature was its own tormentor, and I believe its name was Boswell."

The Hebrides adventure capped the most settled period of Boswell's life. He was 32 then—reasonably content and cheerful, a busy, respectable advocate making a decent living, with a loving wife and the first of their five children. Eventually, however, he began drinking heavily, losing money at cards, visiting prostitutes. In his profession, he hurled himself into lost causes and earned a reputation for erratic behavior. After his father died in 1782, it was his turn to be the Laird of Auchinleck, a man of distinction. But soon enough the satisfactions of country life began to pall. And then, late in 1784, Samuel Johnson died of congestive heart failure at age 75.

The news left Boswell "stunned, and in a kind of amaze." It was well known that he had long intended to write Johnson's biography, and no sooner had the great man breathed his last than a letter reached Edinburgh from a prominent bookseller asking that Boswell do so. But before starting that monumental task, he wrote *The Journal of a Tour to the Hebrides*—perhaps he, too, felt the need of a warm-up—which was published to great acclaim in 1785.

Beginning work on the *Life*, Boswell's contempt for Scotland's "coarse vulgarity" and "Presbyterian prejudices" got the better of him. He had long thought about relocating to London for good. Finally, in 1786, he and Margaret and their children made the move. It was a disaster. Boswell spent much of his time drinking with friends and accomplished only halting progress on the book. Margaret's health deteriorated rapidly. She returned to Auchinleck and soon died there of tuberculosis. Though he had neglected her for years, Boswell was shattered. He wrote in his journal that he longed "to have but one week, one day, in which I might again hear her admirable conversation and assure her of my fervent attachment notwithstanding all my irregularities."

Back in London after a dismal interval of mourning at Auchinleck, Boswell resumed work on the *Life*. He wrote by fits and starts, often moving forward only with the gentle prodding of Edmond Malone, a friend and Shakespearean scholar. He did not set out to be innovative, but, says biographer Adam Sisman, he did write consciously for effect. When he was in school in Glasgow, one of his teachers had been Adam Smith, who would later write the landmark economic treatise *Wealth of Nations*. Smith impressed upon Boswell the importance of detail—he said, for example, that he was "glad to know Milton wore latchets in his shoes, instead of buckles." It was a lesson Boswell would never forget. He often said he wanted to write the *Life* like a "Flemish picture," meaning rich in painstaking detail. He was a superb reporter, adept at ferreting tidbits from Johnson's acquaintances, and of course he had shrewdly teased many vivid nuggets out of the man himself, keeping an especially sharp eye for tics and odd behaviors, such as the doctor's shabby personal appearance, his "convulsive starts and odd gesticulations" and his appalling manners at the dinner table. "Let me not be censured for mentioning such minute particulars," he pleaded. "Every thing relative to so great a man is worth observing."

Boswell also took care to compose his book in what he called "scenes," Sisman points out, skillfully dramatized little playlets piled one atop another. It was a technique all but unprecedented at the time. The result was biography as intimate epic—a stirring narrative with a glamorous supporting cast and the loquacious warts-and-all hero at center stage. Published in 1791, the book was an immediate success. A review in *Gentleman's Magazine* called it "a literary portrait . . . which all who knew the original will allow to be THE MAN HIMSELF." The statesman Edmund Burke told King George it was the most entertaining book he had ever read. The massive, two-volume set was expensive—it cost two guineas, four times as much as a typical book—but the first printing of 1,750 copies sold out within months.

Boswell enjoyed some brief exaltation, and even took out

PP. 70, 71 KATE BROOKS / POLARIS

Boswell became Laird of the Auchinleck estate (the study, above, in 2004) upon the death of his father in 1782. Though Boswell installed his wife and children there, he continued to spend most of his time in London: "The country does not at all suit me."

KATE BROOKS / POLARIS

a boasting ad in London's *Public Advertiser*: "Boswell has so many invitations in consequence of his *Life of Johnson* that he may be *literally* said to *live* upon his deceased friend." But some acquaintances, angered by his "practice of publishing without consent what has been thrown out in the freedom of conversation," avoided his company. Others noticed that once he finished his great work, he lost his bearings. Perhaps the lowest point came when his daughter took him to task for misbehaving with one of her 14-year-old friends. "It seems that after dinner, when I had taken too much wine, I had been too fond," he wrote in his journal, claiming that he had no clear memory of the event.

Boswell's final years were grim. He remained in London, carousing and whoring; his health was ruined by repeated venereal infections. Hounded by debts incurred educating his children and buying land in Ayrshire, he complained that he felt "listless and fretful." He died at home from kidney failure and uremia at the age of 54. "I used to grumble sometimes at his turbulence," grieved Malone, " but now miss and regret his noise and his hilarity and his perpetual good humour, which had no bounds."

After his death, Boswell's reputation went into a spin. Thanks in no small part to a devastating critique by essayist Thomas Macaulay in 1831, the writer came to be regarded as a toady who had somehow managed to produce a worthy biography that reflected the greatness of its subject, not its author. "Of all the talents which ordinarily raise men to eminence as writers, Boswell had absolutely none," Macaulay wrote. That view began to change only after many of Boswell's papers, including his journals, came to light in the 1920s. They were found in an Irish castle, where they had been taken by a descendant; some had been stuffed into a box used to store croquet equipment. Still more papers turned up later, including the original manuscript of the *Life*. Yale University began publishing the journals in 1950, and the first volume sold almost a million copies. Since then the journals have helped Boswell emerge from Johnson's shadow. "We read him now," says the National Library's Iain Brown, "for the pure pleasure of reading Boswell." What he wrote, and how he wrote, still matter. "Not only did Boswell invent the biography as we know it," notes critic Charles McGrath, "he was also, in effect, the father of feature journalism, and for good and ill he created many of the conventions we still observe. The celebrity profile . . . oral history, documentary reporting . . . the travel yarn, the high-powered-dinner-party piece—the list of forms that he mastered or invented goes on and on."

Even as Boswell's reputation was undergoing rehabilita-

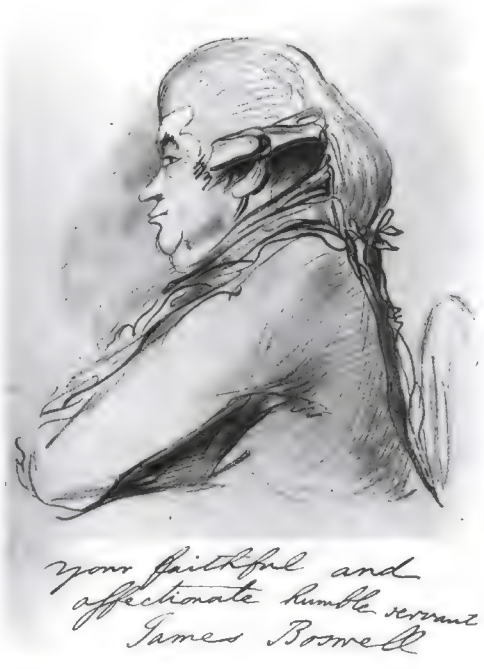
"[I] miss and regret his noise and his hilarity," wrote Boswell's friend and editor Edmond Malone on the diarist's death from kidney failure at age 54 (above, the family mausoleum at Auchinleck). Thomas Lawrence drew the solid Scot (below) c. 1793.

tion, Auchinleck was falling into disrepair. By the mid-1960s, when another James Boswell inherited the house, it had so deteriorated that the new owner could not afford to fix it. He sold it, and in 1999 it was given to the Landmark Trust, a charity that rents historic buildings to vacationers. After spending nearly $5 million on renovations, the trust opened Auchinleck to overnight guests two years ago, which is how I was able to stay there last summer.

To get to the house, I drove from the village of Auchinleck down a country lane, crossed a small stone bridge and topped a rise. There I found a beautiful mansion standing all by itself in the countryside. Above the entrance, I noticed an elaborately carved pediment "terribly loaded with Ornaments of Trumpets & Maces and the Deuce knows what," as another guest recorded in 1760, and below it Horace's cautionary admonition about keeping a balanced disposition.

Exploring outside, at the end of a steep path I stumbled upon a small beach at the edge of the River Lugar, a slow-flowing stream. On the other side, a cliff reared over the black water. It struck me that Boswell had taken Johnson to that very spot, and, so moved by the "romantick scene," had confided to him his family history and gushed about his own distant relationship to King George III.

Neil Gow is a local judge and the current chairman of the Auchinleck Boswell Society. On my last day in Scotland, I met him in the churchyard at the Boswell mausoleum. A dapper man with a twinkle in his eye, Gow led me inside. Ducking our heads, we descended several stone stairs into a dark, arched space where nine Boswells, including James, his father and Margaret, lay in sepulchers behind unfinished stone. One niche was broken; when Gow beamed his flashlight through the hole, we could see a skull inside. On another sepulcher, I saw the initials J.B. "That's where he is," Gow said. So in the end, I reflected, heritage had won out after all. Here was James Boswell, surrounded by family—including the father he could not please and the wife he so often disappointed. In death, the reluctant Scotsman had done what he could not bring himself to do in life. He had come home for good.



KATE BROOKS / POLARIS; NATIONAL PORTRAIT GALLERY, UNITED KINGDON / BRIDGEMAN ART LIBRARY

ADVERTISEMENT

You've read about it. Now live it.

Smithsonian Journeys

MEMBERS' CHOICE TOURS

In celebration of *Smithsonian* magazine's 35th anniversary, Smithsonian Journeys has developed a special collection of Members' Choice Tours, bringing to life over three decades of world discovery.

With an expert Smithsonian Study Leader as your guide, you'll experience historic and romantic destinations in new ways: an invigorating hike across the British Midlands, a rediscovery of the Renaissance in Italy or a trek to the lost cities of the Americas. Only Smithsonian Journeys can bring you this complete cultural immersion, featuring luxury accommodations and gourmet dinners that give a true flavor of each region. For your convenience, Members' Choice Tours depart every month.

Call 1-800-654-2048 or return the reply card for your free Members' Choice catalog.

Smithsonian Institution

Egypt and the Nile

13 DAYS INCLUDING AIRFARE FROM

$4,675

In September, 1999, *Smithsonian* magazine reviewed the Metropolitan Museum of Art's "Eygptian Art in the Age of the Pyramids"—the first major, comprehensive exhibition of the art of the Old Kingdom. As we explore the art and architecture of the period, our Egyptologists will give you an insider's view to the Valley of the Kings, the Temples of Karnak and Luxor, as well as the Great Pyramid and the Sphinx. And you'll experience Egypt like the Pharaohs of old—from the deck of a ship on the Nile.

EUROPE • SOUTH AMERICA • NORTH AMERICA • AFRICA

The Aztec god Xipe Totec (depicted in a c. 1500, 3-foot-tall clay rendering, in which he wears the flayed skin of a sacrificial victim) was linked to agricultural renewal. When Spanish adventurer Hernán Cortés met Aztec ruler Motecuhzoma II in 1519 (opposite, in an 1892 illustration), they exchanged gifts; later Cortés had the Aztec leader imprisoned.

A new exhibition probes the contradictions of an advanced civilization that practiced human sacrifice

BY DAN HOFSTADTER

THE AZTECS

BLOOD AND GLORY

IT IS SOBERING and perhaps humbling to remember that only 500 years ago, in Mesoamerica, an empire held sway whose creative energy and sheer ruthlessness announced a long and powerful future. Yet the dominion of the Aztecs, a once-migrant people who had settled in the central highlands of what is now Mexico, lasted only from about 1428 to 1521. In the space of just a few generations all was staked and lost. Amazingly, from the founding of their capital city, Mexico-Tenochtitlan, in the early 14th century, to the apex of their power, in the late 15th, the Aztecs built one of the most dazzling civilizations in history. Rising from the marshes of an island in Lake Tetzcoco, the site of present-day Mexico City, Tenochtitlan grew into a sort of Venice of the New World, dominated by towering pyramids and traversed by a network of canals spanned by bridges so wide that ten horsemen could cross them abreast. The metropolis also served as the nerve center of an empire that extended from central Mexico south into what is today Guatemala. The Aztecs were so disciplined, so skilled in the arts of war, that their realm appeared invincible. Then, in February 1519, eleven ships led by Spanish explorer Hernán Cortés appeared off the coast of the Yucatán Peninsula. By August 1521, Cortés and his Indian allies had conquered Tenochtitlan. The glorious city lay in ruins.

Tenochtitlan was as astonishing legally, socially and artistically as it was architecturally. The Aztecs had a system of standardized laws that strictly defined behavior and responsibilities and provided structure to the empire. They developed accurate astronomic knowledge and elaborate calendars. Compulsory religious education was mandated for children. Most slavery seems to have been voluntary and temporary, a means of escaping from indebtedness, drunkenness or desperate poverty. Divorce, we are told, was legal, notably on the grounds of spousal abuse, and mothers could receive custody of their children. Women in childbirth were regarded as warriors, and those who died giving birth received honors due a warrior. Poetry, oratory, music and dance were deeply respected; sculpture and jewelry were brought to an extraordinary pitch of refinement. The emperor maintained an extensive menagerie of animals, and sumptuous flower gardens luxuriated everywhere, testifying to a great love of nature.

Yet the Aztecs also practiced human sacrifice. According to one calculation, the emperor Ahuitzotl, who ruled from 1486 to 1502, ordered 20,000 captured warriors slaughtered during a single ceremony. Flowers and blood, blood and flowers—the juxtaposition is so strange that we can scarcely visualize this beautiful and terrifying civilization. As the renowned American historian William H. Prescott wrote, "The Aztec character was perfectly original and unique. It was made up of incongruities apparently irreconcilable."

WHEN CORTÉS arrived in Tenochtitlan, during the reign of Motecuhzoma II (better known to us as Montezuma), he found a city of about 250,000 inhabitants that was built on a grid pattern and imbued with a remarkable sense of order. Long causeways connected the island city to the mainland, and aqueducts brought fresh water from a nearby hill. Motecuhzoma's palace was "so marvelous," Cortés noted in a letter to his sovereign, King Charles V, "that there is nothing like it in Spain." The city's commercial vitality also surpassed anything he had seen back home. He was shown a market square "twice the size of the town of Salamanca . . . where every day there are more than sixty thousand souls who buy

New York-based author DAN HOFSTADTER wrote about the vast underground complex beneath Naples, Italy, in the November issue.

The 115-foot-tall Templo Mayor, or Great Pyramid (below, as envisioned in a 1951 rendering), was located in the heart of the Aztecs' capital, Tenochtitlan, in present-day Mexico City. The Aztecs associated the coyote (opposite, a c. 1500 stone carving about 15 inches high) with Tezcatlipoca, the god of war.

IGNACIO MARQUINA / INSTITUTO NACIONAL DE ANTROPOLOGÍA E HISTORIA, MEXICO; P. 76 MICHEL ZABÉ AND ENRIQUE MACIAS / ORIGINALLY PUBLISHED IN AZTECS © ROYAL ACADEMY OF ARTS, LONDON; P. 77 BETTMANN / CORBIS

and sell. . . . " One of his soldiers, Bernal Díaz del Castillo, wrote that the architecture of the Aztecs, "rising from the water, all made of stone, seemed like an enchanted vision. . . . Indeed some of our soldiers asked whether it was not all a dream."

With the European discovery of the New World, two highly developed civilizations that knew nothing of each other collided, and the consequences, for the Aztecs, were catastrophic. It is estimated that when Cortés first set foot on Mexican soil, about 25 million people lived there. By 1600, the population had shrunk to around one million, due to massacres by Cortés and his Indian allies, the brutality of Spanish colonial rule and low native resistance to diseases such as smallpox and measles transmitted by the Spanish conquerors. The annihilation was so thorough that today it is difficult to fully picture the sophistication, opulence and sheer grandeur of the Aztec Empire. What information we have about the civilization—its beliefs, culture and daily life—has come from chronicles and letters written by descendants of the Indian nobility and by the Spanish invaders and from records compiled by Spanish friars, who came to educate and convert the indigenous population to Christianity. Though the Aztecs kept copious illustrated manuscripts and books, using mostly pictographic symbols to document their history, religion and way of life, these documents were destroyed by the Spanish or otherwise lost. As it happens, however, enormous strides have been made in Aztec archaeology since the excavation, beginning in 1978, of the Templo Mayor, or Great Pyramid, at Tenochtitlan, so that now we can begin to see the Aztecs more clearly.

A new exhibition at the Guggenheim Museum in New York City has brought together an unprecedented display of Aztec art, and though certain products of this people's creative energy have been lost forever—textiles, fantastic featherwork, almost symphonic flower arrangements—others, such as devotional statuary, figure and animal sculpture and elegant calendric stonework, should prove a revelation to museumgoers. ("The Aztec Empire," which features some 435 artifacts, is on view through February 13, 2005.)

The Guggenheim, it turns out, is a felicitous venue for such an exhibition. Since the inauguration of its branch in Bilbao, Spain, in 1997, the museum has fostered deep ties to the Hispanic world, so a show devoted to a major facet of Mexico's artistic patrimony fits in well with its more international role. The guest curator is Felipe Solís, director of the Museo Nacional de Antropología in Mexico City and an eminent authority on the Aztecs. In addition, Frank Lloyd Wright, the Guggenheim's architect, was heavily influenced by pre-Columbian building styles, and though he had completely digested that influence by the time he designed the museum in the 1940s, its tiered, spiraling construction still owes something to Mesoamerican architecture.

The Aztecs were governed by a *huey tlatoani*, or supreme ruler, who was considered semidivine. Succession to the throne, though not strictly hereditary, tended to remain within the ruling family. Each ruler was selected from among a military council of four controlled by the ruling house. Aztec society was divided into two distinct social classes: the *pipiltin,* or nobility, and the *macehualtin*, or commoners. Nobles, who composed only about 5 percent of the total Aztec population, controlled land, labor and tribute. Most lived in palatial dwellings, wore fine cotton clothing, practiced polygamy, held public office, were exempt from manual labor and were allowed to accumulate and display wealth. Commoners, who tended to live in simple huts of sun-dried brick and dressed in rough clothing, were required to be monogamous and were prohibited from displaying wealth. The nobility and the priesthood were at the top of the social order. Warriors also enjoyed enormous prestige, but there was no standing army; rather, men with military training were called up for specific campaigns, while the nobility tended to fill most permanent positions of command. Beneath this aristocracy, in order of power and wealth, came merchants, artisans, farmers and slaves. Aztecs valued cleanliness and frequented saunas and sweat houses. High-ranking warriors showed a fondness for facial (especially nose and chin) ornaments.

The Aztec Empire was actually a confederation of city-states dominated by an ethnic group called the Mexica. Like the peoples around them, the Mexica were profoundly affected by the cyclic alternation between rainy and dry seasons; they suffered terrible droughts, which gave them a keen sense of nature's unpredictability and the fragility of their world. Many of their gods were associated with cosmic forces, tied to the sun or to the sky, to water, wind, fire, plants, seed and salt, or to death itself. The basic tenet of their religion was that the gods had sacrificed themselves at

A 5 1/2-foot-tall ceramic figure of Mictlantecuhtli (opposite), the Aztec god of the dead, was discovered north of Tenochtitlan's Great Pyramid. Aztecs believed that the liver, hanging pendulously from his stomach, was the seat of the spirit. The Spanish melted down most Aztec goldwork. The nose ring (above), also found near the Great Pyramid, is one of the few pieces to survive.

MICHEL ZABÉ AND ENRIQUE MACIAS / ORIGINALLY PUBLISHED IN AZTECS © ROYAL ACADEMY OF ARTS, LONDON; P. 79 MICHEL ZABÉ AND ENRIQUE MACIAS / MUSEO NACIONAL DE ANTROPOLOGÍA, INAH, MEXICO CITY; P. 80 MICHEL ZABÉ AND ENRIQUE MACIAS / MUSEO DEL TEMPLO MAYOR, INAH, MEXICO CITY

the beginning of the world to create and benefit humankind. Thus, to repay that debt and ensure that the cycles of life and death were maintained, these gods had to be constantly served through ritual offerings of human blood and life.

The practice of human sacrifice, both a sacred duty and, arguably, a terroristic political tool, has tended to prejudice outsiders' views of the Aztecs. Defeated enemy warriors served as their basic pool of victims. For that reason Aztec soldiers tried to capture rather than kill their opponents. These prisoners would then have their hearts torn from their bodies by priests wielding flint knives; the energy of the beating heart was thought to feed the gods. Although no other feature of Aztec civilization has so poisoned our sympathy for their way of life, there is another side to this story. The Spanish conquerors, who loathed the Aztec religion and suppressed it, treated their new underlings so cruelly that they engendered a surge of pro-Indian sympathy that still attaches to the Aztecs. Over the centuries a curious oscillation between horror and pity has skewed our objectivity about this vanquished people.

In the United States, no writer shaped the popular conception of the Aztecs and their fall more than William Prescott, whose *History of the Conquest of Mexico* appeared in 1843 and long remained the standard work on the subject. Prescott entertained interestingly nuanced views of the Aztecs. Though fascinated by Cortés' military and administrative ability, he did not conceal his distaste for politicized Catholicism and in some regards even found the Aztecs superior to his own countrymen. "No one could be born to slavery in Mexico," he acidly noted, "an honorable distinction, not known, I believe, in any civilised community where slavery has been sanctioned."

The Mexican Revolution of 1910-20 and the upswing of the *indigenista* movement, devoted to the reappraisal of the Indian civilizations and folk cultures of Mexico, brought with it a new wave of curiosity about the Aztecs. In 1916, the archaeologist and anthropologist Manuel Gamio published *Forjando Patria*, the first major work to insist, among other things, that Aztec antiquities be studied from an aesthetic point of view. The archaeologist Alfonso Caso took a somewhat similar approach during the 1920s and '30s, attempting to understand and explain the religious and artistic mind-set that lay behind the pre-Columbian ruins of central Mexico.

But probably nothing exalted—and blurred—the popular vision of the Aztecs as much as artist Diego Rivera's murals of ancient Indian life, executed in public buildings in Mexico City between 1921 and 1930. These portray the Aztecs as living in harmony with nature and basically ignore Aztec imperialism and human sacrifice. Rivera the collector was also bumptiously proprietary. Not beyond enlisting the help of grave robbers, he managed to amass nearly 60,000 pre-Columbian objects, which he installed helter-skelter in a museum, called Anahuacalli, that he had built to house them just south of Mexico City. Today, with the wisdom of hindsight, we can say that people like Gamio and Caso and Rivera, while fostering interest in Aztec culture, used it for their own ideological purposes. Both helpful and misleading, they romanticized Aztec artifacts, sculpture and jewelry by neglecting to inquire into their social function.

In recent years, several major Aztec sites have been explored, yielding much new information. Two of these—Mount Tlaloc (named for the Aztec god of rain), where a temple stood, and Tetzcotzingo, with its petroglyph of Tlaloc and ruined figures of maize deities—are situated outside Mexico City. The most important site lies right in the heart of the capital, off the zócalo, or central square. In 1978, an electrical worker digging there happened upon a huge, disk-shaped monolith representing the Aztec moon goddess Coyolxauhqui. This discovery led to the unearthing of the Great Pyramid of Tenochtitlan. The excavation, carried out under the direction of archaeologist Eduardo Matos Moctezuma, yielded an undreamed-of trove of art, artifacts, ritual offerings and human remains.

Before the fall of the Aztec Empire, the four-tiered Great Pyramid rose to a height of 115 feet in the city's central ceremonial precinct; twin shrines capped its summit, one blue, for the god Tlaloc, and the other red and black, for the Aztecs' patron god, Huitzilopochtli. The pyramid served as a temple, but it was more than that. It was a man-made sacred mountain and a venue for human sacrifices, martial triumphs and coronations. Succeeding rulers enlarged the Great Pyramid by expanding or building a masonry envelope around the preexisting structure, burying art, artifacts and caches of votive offerings inside. Thanks to this practice, Matos Moctezuma and his team of archaeologists, biologists, chemists, historians and anthropologists found a kind of encapsulation of Aztec material culture: thousands of objects—ceramics, masses of seashells and coral species, jewelry and mother-of-pearl figurines, model-size canoes and an effigy containing the

A symbol of death, skull masks (above, with two protruding flint knives) may have been used in rituals. The mosaic jaguar chest ornament (opposite, top) was made c. 1200-1500 by the Mixtec, a people conquered by the Aztecs in 1458, and was likely worn by an Aztec warrior of the elite jaguar order. The c. 1500 naturalistic grasshopper (bottom) was carved of carnelian, a type of quartz.

MICHEL ZABÉ AND ENRIQUE MACIAS; P. 83 SAINT LOUIS ART MUSEUM; MICHEL ZABÉ AND ENRIQUE MACÍAS / ORIGINALLY PUBLISHED IN AZTECS © ROYAL ACADEMY OF ARTS, LONDON

seeds of all the major cultivated plants of the region. A nearby building held a group of magnificent war-related sculptures. The pyramid's foundations included a sort of hidden cabinet of curiosities, which preserved carved images and skeletons of various animal species. There were also trophy objects and revered antiquities, such as an Olmec mask and a greenstone mask from the ancient civilization, much admired by the Aztecs, that built the magnificent urban center of Teotihuacan, outside present-day Mexico City. From the Aztec point of view, the spirit-power of the offerings hidden within the pyramid, aided by the hearts of the sacrificial victims, fulfilled a duty to the gods, while the votive art and the trophies confirmed the legitimacy of the empire.

THE GUGGENHEIM exhibition, part of which showcases this excavation, is rich in carvings not only of gods but also of people, beasts and even vegetables. These pieces give a warmer, more vivid impression of Aztec daily life than anything hitherto presented in an American museum. Many of them reflect the economy of the central Mexican altiplano, which was rooted, of course, in agriculture. In these fertile highlands, the Aztecs practiced innovative farming techniques such as swamp reclamation, terracing, crop rotation and large-scale irrigation—including river diversion. Much of what we think of as Mexican cuisine already existed in the Aztec period. Their basic diet consisted of maize ground into porridge, tortillas or tamales, supplemented by beans, chilies and other vegetables. For domesticated livestock, the farmers had only turkeys, ducks and dogs, but many creatures, especially rabbits, deer, birds, insects and fish, were hunted, trapped or netted.

To the Aztecs, however, these creatures were more than a source of food. "Every species, animal or vegetable, every mineral, heavenly body or element," writes Mesoamerican expert Alfredo López Austin, "was created by a deity out of his or her own essence, so that divinity and creation shared the same substance. Before taking the life of a vegetable or an animal, a man would apologize to it for his action, explaining that he was obliged to kill it for his own survival and that his attack on its species would be strictly limited to the satisfaction of his needs."

Naturally, this had consequences for art. The approach to carving that we commonly call stylization, which tries to pare down form to some apprehended inner essence, is found in many cultures, but it is tempting to suppose that among the Aztecs this quest for reductive forms embodies a longing to uncover some divine, underlying essence: the essence of the serpentine, the canine, the avian and so forth.

In the Guggenheim show, for example, there are sculptures of an eagle, a coyote, a grasshopper, a jaguar, a dog, several monkeys and a number of serpents. The grasshopper must rate among the most beautiful nature images ever made, its carnelian surface glowing like some enormous piece of jewelry. The serpent pieces also repay close study. Feathered or unfeathered, these big snakes embody a terrific sense of volume, of weight pushing against weight, of curve balancing curve. The quasi-abstract works are often magnificent: a perfectly proportioned standing cactus, a succulently lobed pumpkin, an enormous snail shell traced with wandering grooves. Even the calendric altars, which show bound fasciae of reeds representing years, are splendid examples of minimalist design. Indeed, quite a few pieces in the show may strike viewers as arrestingly modern.

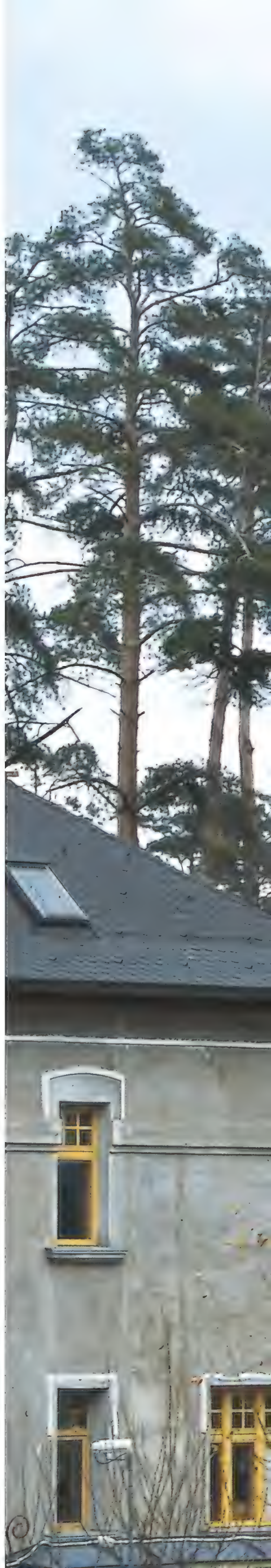
Though the Guggenheim exhibition gives us a sense of the Aztecs' natural environment, clothing, tools, jewelry, domestic animals and ideals of personal beauty, it offers only hints about how the objects were actually used in daily life. In fact, putting Aztec art completely and accurately in context is problematic. Many Aztec sculptures were not meant to be seen by the uninitiated, and some—sealed away in the Great Pyramid—were not meant to be seen at all. How should we approach such pieces?

One is reminded, making one's way through the exhibition, that there was in the sacred quarter of Tenochtitlan a temple, called the *coateocalli,* that served a very peculiar function. "It was here," writes the 16th-century scholar Fray Bernardino de Sahagún, "that lived the gods of the cities that the Mexicans had conquered. They made the gods prisoner and brought them back and set them in this temple." The Aztecs tended to accept rather than exclude local deities—but they did want to make sure they had them under their thumb. And, in a way, the Guggenheim Museum is serving, for a few months, as our coateocalli. We have taken the Aztec gods and put them in a pantheon where we have them under our thumb. Here we can be a little scared of them, or fuss over their well-being: we can spoil them with pedestals, soft lighting and the correct temperature. But if we think we know them, we are only kidding ourselves.

Smoke produced by ritual clay braziers (opposite, a 3-foot-high one, found near the Great Pyramid, that bears an image of a dead warrior attired as an eagle) was believed to lead the souls of the dead to a celestial battlefield. The c. 1500 anthropomorphic mask (above) was carved from a single piece of alabaster and most likely covered the face of a deceased noble during funeral rites.

MICHEL ZABÉ AND ENRIQUE MACÍAS / MUSEO NACIONAL DE ANTROPOLOGÍA, INAH, MEXICO CITY; P. 84 MICHEL ZABÉ AND ENRIQUE MACÍAS / ORIGINALLY PUBLISHED IN AZTECS © ROYAL ACADEMY OF ARTS, LONDON

Monuments to wretched excess (right) are replacing more humble abodes (top left, Anton Chekhov's dacha). Traffic along the Reblyevka, where Lenin (below left) and other Soviet leaders once relaxed undisturbed by the teeming masses, has grown hellish.



cabin fever

As Muscovites get rich on oil, dachas—the rustic country houses that nourish the Russian soul—get gaudy

BY CRAIG MELLOW

PHOTOGRAPHS BY JEREMY NICHOLL

Young professionals such as Alexander (above), an architect, enjoy opulent lifestyles that include caviar dinners and ski trips to the Alps. His ten-room "cottage" is in a community whose house prices have risen 40 percent in the past year.

TURN OFF THE RUBLYEVSKY HIGHWAY 12 miles west of Moscow, negotiate two unmarked lanes, say the right name at the unmarked gate and a guard with a Kalashnikov will wave you expressionlessly through. Eight freshly built houses are nestled among the summer pines, all of them, from the looks of it, as grand as the one owned by my friend Alexander (he asked me not to use his real name)—a ten-room, three-level affair with a sauna in the basement, a heated pool steaming in the backyard, minimalist blob-art in the capacious living room, and jazz tinkling off a state-of-the-art stereo system.

Dinner on the poolside patio is caviar and sturgeon, barbecued king prawns the size of turkey legs, sparkling wine and cognac. The talk is of skiing at Chamonix, duck hunting in Argentina, the relative merits of top-model Audis versus BMWs and, of course, real estate. Alexander, his wife, Olga, and their dozen guests are architects, developers and brokers in a Moscow market that has risen 40 percent over the past year. They are bent on enjoying the moment.

Welcome to the "Rublyevka," a ten-mile stretch of road that is coming to symbolize the country grandeur that the wealthiest Russians seem to prize above all else these days, as well as the outlandish consumption that the less fortunate so resent. Drive past billboards for 24-hour sushi delivery and antiques shops and croissant nooks where village markets stood only two years ago, and play the favorite local game of Guess-Whose-Dacha (rhymes with gotcha).

The turreted palaces built next door to each other by Mikhail Khodorkovsky and Platon Lebedev, former major shareholders of oil giant Yukos and now Russia's best-known prison inmates, are no secret. But the identity of their next occupant is. Some say the yellow stone monstrosity looming out of the trees a few miles away belongs to Pavel Grachev, post-Soviet Russia's first defense minister. Others reckon the owner is a retired head of the GAI (Gosavtoinspektsia), Russia's sticky-fingered highway police.

Traffic along the two-lane Rublyevka, where Soviet leaders from Lenin to Yeltsin enjoyed the great outdoors undisturbed by the teeming masses, has grown hellish. Land goes for about $600,000 an acre. No one can be sure, in the chaos of frantic overdevelopment, whether the well they drill for water won't hit somebody else's plumbing. But with Russia's oil-stoked economy growing at 7 percent a year, none of that seems to matter. New neighbors pour in daily to fill up the tracts hawked as "Silver River" or "Tall Pines."

"This is Beverly Hills," says Olga Kozyreva, manager of the

Freelance journalist CRAIG MELLOW lived in Moscow, Russia, from 1991 to 1998. He is now based in New York City. American freelance photographer JEREMY NICHOLL is based in Moscow.

P. 86 TOP: AUSTRIAN ARCHIVES / CORBIS

Credit Bank of Moscow's newly minted Rublyevka branch, which tempts customers with credit cards for children as young as 6. "The best of everything in our country is here."

AMERICANS REFLEXIVELY THINK of $50-a-barrel oil as enriching Arab sheiks. But Russia is the world's second-biggest crude exporter after Saudi Arabia, earning close to $300 million a day at current prices. To those catching the trickles of this fortune, stock markets and even bank accounts are newfangled, dangerous inventions. Fixing up the dacha is something they have gone to with a vengeance.

Millions of urban Soviet families got some sort of country plot from the state, a retreat where they could relax in dense northern woods thick with mushrooms and raspberries in summer and fairy tale snowdrifts in winter. The prime areas west of Moscow, where the Moskva River is still swimmable and prevailing winds blow toward the pollution of the metropolis, were doled out according to rank: Central Committee and Academy of Sciences members on the Rublyevka, generals and Bolshoi Theater performers along the Kiev Highway. All but the grandest dachas were little more than cabins, where water had to be hauled by hand in a bucket and heat came from a wood-burning stove.

No more. Muscovites from all economic strata have scrimped through the post-Soviet period to add gas heat, indoor plumbing and other amenities to their houses. The wealthier among them have torn down the old cabins or consigned them to their nannies and bodyguards while throwing up palaces. "Our people's taste still tends to the monumental," observes Gary Onanov, a burly Georgian builder who has put up 150 houses in the west-of-Moscow arc of prosperity. "I try to sell them prefab Scandinavian houses for $150,000. But they want thick stone walls and a garage for five cars."

As the supply of Soviet-era lots has dwindled, gated communities known as cottage villages have become prized, even though they often sacrifice the traditional dacha's forested charm. The "Piney Grove" subdivision off the Rublyevka is pitched in a barley field without a tree in sight, its $1.5 million stone mansions virtually peering into each other's windows from Levittown-size lots. But developers say the villages are all about exclusivity. "A lot of the appeal is living in a unified social layer," says Sergei Tsyvin, sales director at Moscow's Inkom Real Estate. "A person can feel at peace knowing there's no one around either looking up or looking down at him."

Most of the labor for Moscow's dacha renaissance comes from outside Russia, as itinerants from all corners of the ex-

The new breed of dacha owner likes to debate the work habits of various nationalities (top right, a construction worker from Tajikistan). Olga Kozyreva (middle) works for the Credit Bank of Moscow, which offers credit cards to children as young as 6. "This is Beverly Hills," she says. "The best of everything is here." Mikhail Khodorkovsky (bottom, in 2002) was once the CEO of oil giant Yukos. Today he sits in a prison cell on accusations of fraud and tax evasion.

JEREMY NICHOLL / POLARIS (3)

As the supply of Soviet-era lots has dwindled, "cottage villages" (left) have become prized, even though they often sacrifice the traditional dacha's forested charm. "A lot of the appeal is living in a unified social layer," says one broker.

USSR hope to earn enough from the summer building season to scrape through a winter of unemployment back home. Hammers start singing at sunup as the shadow labor brigades tumble out of makeshift quarters in their employer's shed or on a back porch, simultaneously saving money and dodging any police who might ask for working papers. Dacha owners, for their part, make a parlor sport out of debating the work habits of various nationalities. "I had these two Moldovans here who turned out to be a teacher and a biologist, so naturally they couldn't do a thing with their hands," says Elena Smirnova (not her real name), who sold her Moscow apartment last year and sank the funds into rebuilding her family dacha off the Kiev road. "Then I found a Tajik who was golden. Mind you, though, some Tajiks will just lean on their shovels and stare into space."

Yet those tempted to see the stereotypical mix of oligarchs, bandits and corrupt bureaucrats piggishly flaunting their ill-gotten gains ought to look again. Those at the unsavory apex of the ex-Soviet pyramid built their country manors back in the wild 1990s. Newer money, like Alexander and Olga's, comes from entrepreneurs and other professionals who have driven Moscow's astonishing transformation over the past decade from a desolate central-planning barracks to a vibrant 24-hour European capital with world-class amenities and style. "The person who is earning a lot of money today is an interesting and intelligent person," says Gary Onanov. "It's a restaurant owner who started out not long ago with a shish kebab stand."

And hot on their heels is a bona fide middle class. The average price for a house in a cottage village has already dropped to $500,000, broker Tsyvin says, as "people realize that [7,500 square feet] is really a bit large for a family of four or five." The figure will fall further, he predicts, as builders turn to pent-up demand for "economy class" homes starting around $200,000.

How many Muscovites can afford a country retreat at that price in a nation without mortgage financing? Statistics are unreliable with declared income still a novelty, but brokers say the number is surely in the hundreds of thousands.

All the same, only at their peril do the dacha elite forget that they take their ease atop a volcano known as Russia in its still-wrenching transition out of communism. Beyond the lights of Moscow, many families do live on the official per capita income of $200 a month and are inclined to see even a mini-fortune of $200,000 as having been stolen from their common socialist pot during the rigged bidding of early capitalism. No one on the Rublyevka expects that rage to erupt in a new 1917. But almost everyone knows it is out there.

"People stick to the Rublyevka and other luxury districts not only for prestige but for safety," says Gary Onanov. "You could buy all the land you want [60 miles] from Moscow. But then when you go to work one day, the neighbors will come and burn your lovely dacha down."

Macular Degeneration

Discover why thousands of people with low vision have purchased the VideoEye® power magnification system to continue reading and doing everyday tasks . . . .

as seen on the NBC TODAY show

Strawberry Pie
3 quarts fresh strawberries
1-1/2 cups sugar
6 tablespoons cornstarch
2/3 cup water
1 deep-dish pastry shell (10 inches)
1 cup heavy cream
1-1/2 tablespoons instant vanilla pudding mix
In a large bowl, mash enough berries to equal 3 cups. In a saucepan, combine the sugar and cornstarch. Stir in the
VideoEye!

Try it at home for 30 days!

VideoEye!

Dept SM 10211 West Emerald Boise, ID 83704
ph (208) 323-9577 fax (208) 377-1528

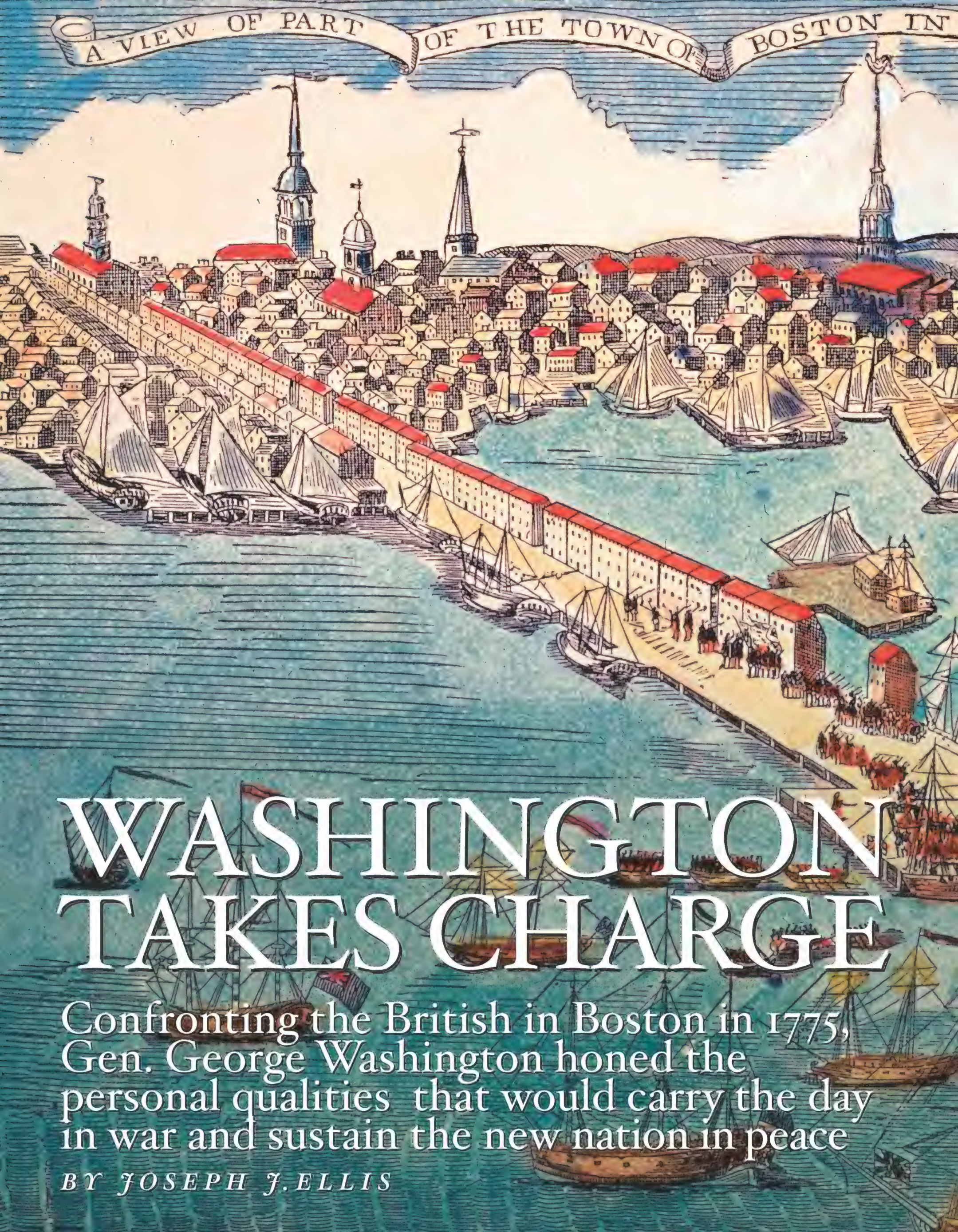
For information or to order call

1-800-416-0758

30 day money-back guarantee

www.videoeye.com

® VideoEye is a registered trademark of VideoEye Corporation Patents pending



WASHINGTON TAKES CHARGE

Confronting the British in Boston in 1775, Gen. George Washington honed the personal qualities that would carry the day in war and sustain the new nation in peace

BY JOSEPH J. ELLIS

British troops occupied Boston in October 1768 and over time fortified some of the hills overlooking its harbor. When Washington (in a 1776 painting by Charles Willson Peale) got there in July 1775, he found the colonial militia ill-trained and poorly clothed.

IS ANY AMERICAN more venerated than George Washington? Or more conspicuous? From our currency to our public places and schools to the names of so many of our citizens, the nation's first president is woven inextricably into America's cultural fabric. And more than two centuries after his death, the historical thirst for more Washingtonia by historians remains undiminished: the University of Virginia is compiling every available scrap of paper sent to or by Washington into what is expected to fill some 90 volumes. But while we may have committed to memory Henry "Light-Horse Harry" Lee's eulogy of Washington as "first in war, first in peace and first in the hearts of his countrymen," today he remains more monument than man.

A new biography of Washington by historian Joseph Ellis helps turn marble back to flesh. By focusing tightly on Washington's character in His Excellency, *published in November by Alfred A. Knopf, Ellis seeks to recover what he calls "the more vital, more combustible and more dynamic aspects of his personality." Washington, Ellis says, was "not a nice guy" but a* force*: the "most ambitious, determined and potent personality of his age." What sets him apart from his peers is his "capacity of judgment. He makes the big decisions correctly." In the excerpt that follows, Washington's first engagement as commander in chief of the Continental Army—the siege of Boston from June 1775 to March 1776—foreshadows the strength of character and other traits that would carry him to victory over the British and into the presidency.*

Washington arrived in Boston two weeks after the June 17, 1775, Battle of Bunker Hill, seen as a tactical victory for the British but a moral triumph for American militia forces.

ALTHOUGH THERE WAS NO WAY George Washington could have known it at the time, when Philadelphia's Continental Congress appointed him military commander in June 1775, he was about to oversee the longest declared war in American history. He was 43 years old when he rode out of his Mount Vernon estate in May 1775. He was 51 and the most famous man in the world when he arrived back home on Christmas Eve 1783, following the American victory over Great Britain. The cause that he headed had not only smashed two British armies and destroyed the first British Empire, it had also set in motion a political movement committed to principles that were destined to topple the monarchical and aristocratic dynasties of the Old World.

The American Revolution was the central event in Washington's life, the crucible for his development as a mature man, a prominent statesman and a national hero. And while zealous students of the Civil War might contest the claim, the movement that Washington found himself heading was also the most consequential event in American history, the crucible within which the political personality of the United States took shape. In effect, the character of the man and the character of the nation congealed and grew together during those eight fateful years. Washington was not clairvoyant about history's next destination. But he did realize from the start that, wherever history was headed, he and America were going there together.

The siege of Boston from June 1775 to March 1776 marked Washington's debut as commander in chief. Here, for the first time, he encountered the logistical challenges he would face during the ensuing years of the war. He met many of the men who would comprise his general staff for the duration. And here he demonstrated both the strategic instincts and the leadership skills that would sustain him, and sometimes lead him astray, until the glorious end.

THE STORY OF THE SIEGE can be told in one sentence: Washington's makeshift army kept more than 10,000 British troops bottled up in the city for more than nine months, at which point the British sailed away to Halifax. Less a battle than a marathon staring match, the conflict exposed the anomalous political circumstance created by the Continental Congress, which was prepared to initiate war a full year before it was ready to declare American independence. Although Washington subsequently claimed that he knew by the early fall of 1775 that King George III was determined to pursue a military rather than political solution to the imperial crisis, he went along with the prevalent fiction that the British garrison in Boston contained "Ministerial Troops," meaning that they did not represent the king's wishes so much as those of evil and misguided ministers. And although Washington eventually expressed his frustration with the

GRANGER COLLECTION; P. 92 BRIDGEMAN ART LIBRARY; P. 93 BROOKLYN MUSEUM OF ART, NEW YORK / BRIDGEMAN ART LIBRARY

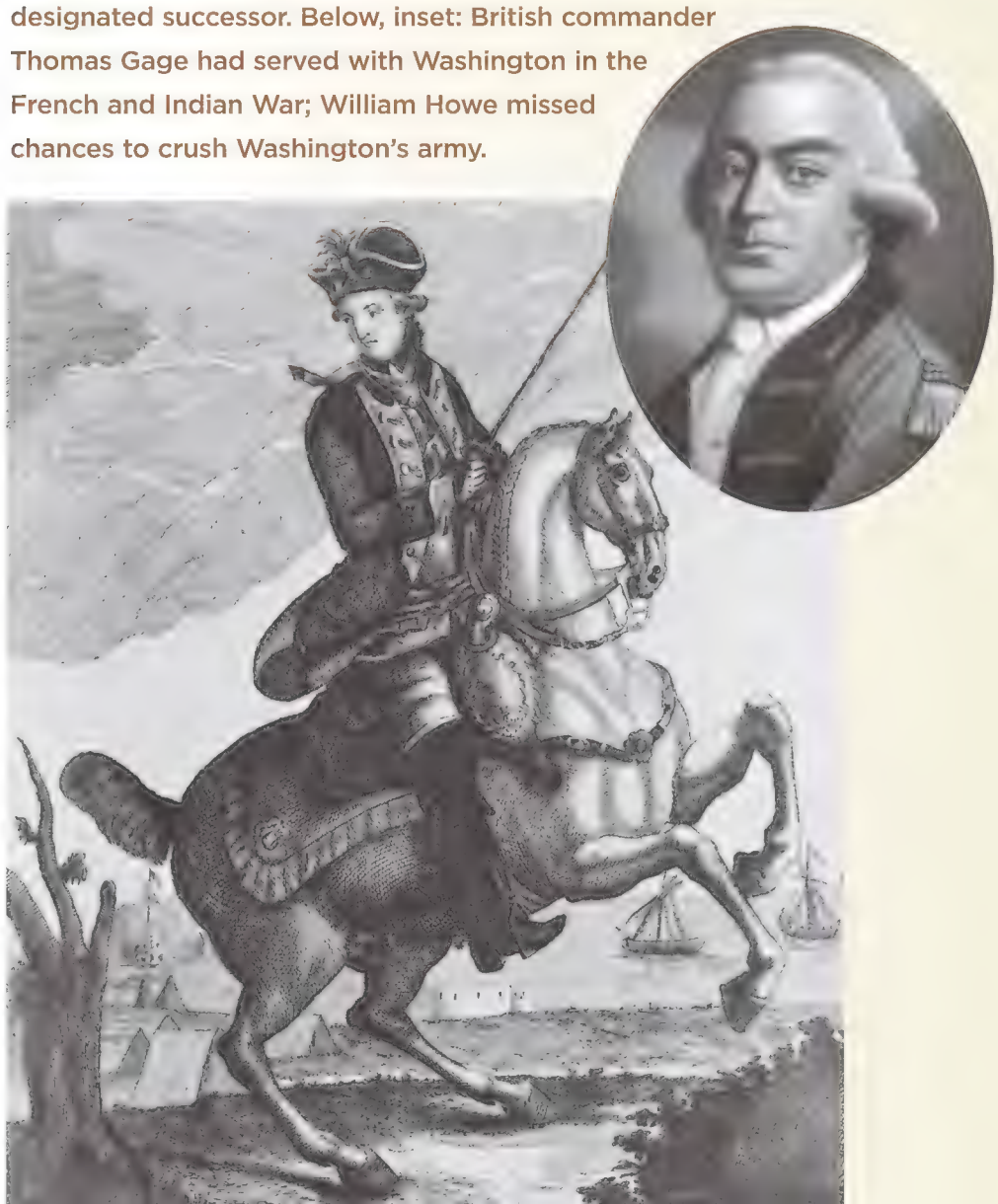
moderate faction in the Continental Congress, who were "still feeding themselves upon the dainty food of reconciliation," as he put it in a letter to his brother John Augustine, he also recognized that the radical faction, led by John Adams, needed to exhaust all the diplomatic alternatives and patiently wait for public opinion outside New England to mobilize around the novel notion of American independence.

Events of enduring significance had occurred before Washington assumed command of 16,000 colonial militia on July 3, 1775, in Cambridge. On June 17, about 2,200 British troops made three frontal assaults on New England militia units entrenched on Breed's Hill. Later misnamed the Battle of Bunker Hill, the fight was a tactical victory for the British, but at the frightful cost of more than 1,000 casualties, nearly half the attacking force. When word of the battle reached London, several British officers observed caustically that a few more such victories and the entire British Army would be annihilated. On the American side, Bunker Hill was regarded as a great moral triumph that reinforced the lesson of Lexington and Concord: that militia volunteers fighting for a cause they freely embraced could defeat disciplined British mercenaries.

Two seductive illusions were converging here. The first was the perennial belief harbored by both sides at the start of most wars that the conflict would be short. The second, which became the central myth of American military history, was that militia volunteers fighting for principle made better soldiers than trained professionals. Washington was not completely immune to the first illusion, though his version of a quick American victory depended on the willingness of the British commander, Gen. William Howe, to commit his force in a decisive battle outside Boston, in a repeat of the Bunker Hill scenario, which would then prompt the king's ministers to propose acceptable terms for peace. Neither Howe nor the British ministry was prepared to cooperate along these lines, and since the only acceptable peace terms on the American side—independence of Parliament's authority—were at this stage nonnegotiable on the British side, even Washington's narrow hope had no realistic prospects.

Washington was thoroughly immune to the second illusion about the innate superiority of militia. Based on his earlier experience as commander of the Virginia Regiment, reinforced by what he witnessed on a day-to-day basis at his Cambridge encampment, he was convinced that an army of short-term volunteers, no matter how dedicated to the cause, could not win the war. "To expect then the same service from Raw, and undisciplined Recruits as from Veteran Soldiers," he explained in a February 1776 letter to John Hancock, "is to expect what never did, and perhaps never will happen." His convictions on this score only deepened and hardened over the years, but from the start he believed

Washington's generals, clockwise from top: Horatio Gates faulted Washington's plans to attack Boston; Henry Knox would become the first secretary of war; Washington cussed out Charles Lee, said an observer, "till the leaves shook on the trees"; Nathanael Greene was Washington's designated successor. Below, inset: British commander Thomas Gage had served with Washington in the French and Indian War; William Howe missed chances to crush Washington's army.



GRANGER COLLECTION; NATIONAL PORTRAIT GALLERY, S. I.; NATIONAL PORTRAIT GALLERY, S. I. / ART RESOURCE; GRANGER COLLECTION; LIBRARY OF CONGRESS (2)

Adapted from *His Excellency* by Joseph J. Ellis. © 2004 Joseph J. Ellis. Published by arrangement with Alfred A. Knopf, a division of Random House, Inc.

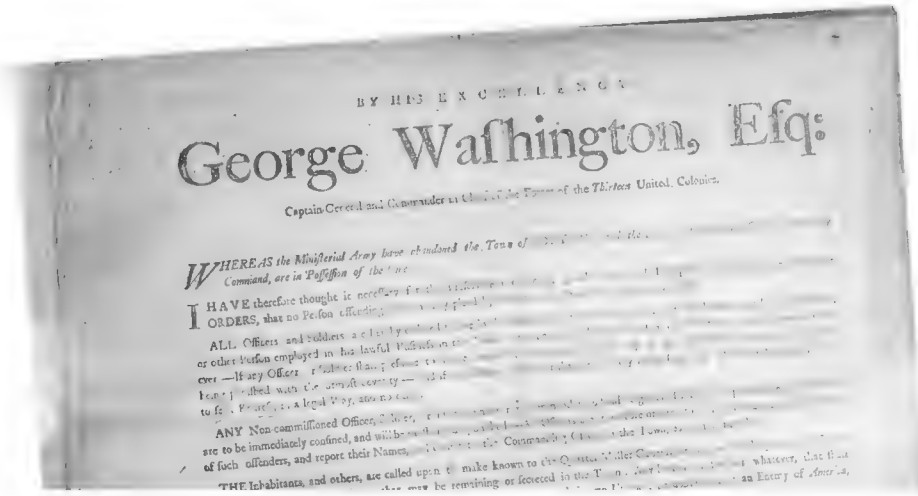
that militia were only peripheral supplements to the hard core, which needed to be a professional army of disciplined troops who, like him, signed on for the duration. His model, in effect, was the British Army. This, of course, was richly ironic, since opposition to a standing army had been a major source of colonial protest during the prewar years. To those who insisted that a militia was more compatible with revolutionary principles, Washington was brutally frank: those principles can only flourish, he insisted, if we win the war, and that can only happen with an army of regulars.

Another significant development occurred on his way to Cambridge, an event less conspicuous than the Battle of Bunker Hill but with even more far-reaching implications. Both the New York and the Massachusetts legislatures wrote congratulatory letters addressed to "His Excellency," which soon became his official designation for the remainder of the war. To be sure, "His Excellency" is not quite the same as "His Majesty," but throughout the summer and fall of 1775, even as delegates to the Continental Congress struggled to sustain the fiction that George III remained a friend to American liberty, poets and balladeers were already replacing the British George with an American version of the same name.

This new semi-royal status fit in the grooves of Washington's own personality and proved an enduring asset as important politically as his wife Martha Custis' huge dowry had been economically. The man who was obsessed with control was now the designated sovereign of the American Revolution. The man who could not bear to have his motives or personal integrity questioned was assured that he enjoyed more trust than any American alive. The British would change commanding generals four times; Washington was forever. Certain deficiencies in his character—aloofness, a formality that virtually precluded intimacy—were now regarded as essential byproducts of his special status, indeed expressions of his inherent dignity. And the man who had bristled at the presumptive condescension of British officers and officials during his service in the French and Indian War was now in charge of the military instrument designed to obliterate all vestiges of British power in North America.

On the other hand, the political and even psychological ramifications of his public role did require some personal adjustments. In August 1775 he made several critical comments about the lack of discipline in the New England militia units under his command and described New Englanders in general as "an exceedingly dirty & nasty people." As a mere Virginia planter such expressions of regional prejudice would have been unexceptional. But as the symbolic spokesman for what were still being called "the United Colonies," the comments created political firestorms in the Massachusetts Legislature and the Continental Congress. When Joseph Reed, a Philadelphia lawyer who served briefly as Washington's most trusted aide-de-camp, apprised him of the hostile reaction, Washington expressed his regrets for the indiscretion: "I will endeavor at a reformation, as I can assure you my dear Reed that I wish to walk in such a Line as will give most general Satisfaction."

Even within what he called "my family," Washington needed to remain circumspect, because his family included staff and aides-de-camp. We know that Billy Lee, his mulatto servant, accompanied him on foot or on horseback at all times, brushed his hair and tied it in a queue every morning, but no record of their conversations has survived. We know that Martha joined him at Cambridge in January 1776, as she would at winter quarters during all subsequent campaigns, but their correspondence, which almost surely contained the fullest expression of personal opinion Washington allowed himself, for that very reason was destroyed after he died. The bulk of his correspondence during the war years, so vast in volume and officious in tone that modern-day readers risk mental paralysis, was written by his aides-de-camp. It is therefore the expression of an official, composite personality, usually speaking a platitudinous version of revolutionary rhetoric. For example, here are the General Orders for February 27, 1776, when Washington was contemplating a surprise attack on the British defenses: "It is a noble Cause we are engaged in, it is the Cause of virtue and mankind, every temporal advantage and comfort to us, and our posterity, depends upon the Vigour of our exertions; in short, Freedom or Slavery must be the result of our conduct, there can therefore be no greater Inducement to men to behave well." The inflated rhetoric concluded with the more candid warning that anyone attempting to retreat or desert "*will be instantly shot down.*"


BY HIS EXCELLENCY
George Washington, Esq;
Captain General and Commander in Chief of the Forces of the Thirteen United Colonies.
WHEREAS the Miniſterial Army have abandoned the Town of ... Command, are in Poſſeſſion of the ...
I HAVE therefore thought it neceſſary ... ORDERS, that no Perſon offending ...
ALL Officers and Soldiers ... or other Perſon employed in his lawful Buſineſs ... ever —If any Officer ... to ſee ... a legal Way, ...
ANY Non-commiſſioned Officer, ... are to be immediately confined, and with... of ſuch offenders, and report their Names, ... the Commander; ... the Town ...
THE Inhabitants, and others, are called upon ... make known to the ... whatever, that ... be remaining or ſecreted in the Town ... an Enemy of America,

After the British occupying army left Boston, Washington issued general orders (above) to his troops to "live in the strictest Peace and Amity with the [city's] Inhabitants." He also urged the town fathers to turn over remaining British supplies and identify spies.

Aware of his own limited formal education, Washington selected college graduates who were "Pen-men" as aides. His most trusted lieutenants—Joseph Reed was the first, followed by Alexander Hamilton and John Laurens later in the war—became surrogate sons who enjoyed direct access to

LIBRARY OF CONGRESS

JOSEPH J. ELLIS is a history professor at Mount Holyoke College.

Love to travel? Love to learn?
Take the Smithsonian on Your Next Trip

U.S. AND CANADA JOURNEYS

SPRINGTIME ON THE LOWER MISSISSIPPI
APRIL 7-16, 2005
From the legendary *Delta Queen*, explore the heart of the Deep South from Memphis to New Orleans, including live jazz, historic Civil War battlefields, and antebellum plantations. From $4,395

SHILOH AND BRICE'S CROSS ROADS
APRIL 14-18, 2005
Explore the Civil War battlefields of Tennessee at Shiloh and Brice's Cross Roads with historian Ed Bearss. $1,375

MYSTERIES OF CHACO CANYON AND MESA VERDE
APRIL 22-27, 2005
Visit key archaeological sites of the American Southwest with Smithsonian anthropologist Bruce Bernstein. $2,195

THE METROPOLITAN OPERA
MAY 11-15, 2005
Enjoy premier seating at four operas, exclusive backstage programs, and discussions with opera expert Fred Plotkin. $2,695

THE INTERNATIONAL BEAD EXPO
MAY 18-22, 2005
Experience Miami's International Bead Expo with a top jewelry designer. Attend the Expo's special preview and workshops. $1,695

GRAND CANYON SAMPLER
JULY 1-4 AND SEPTEMBER 2-5, 2005
Take a helicopter ride to the bottom of the Grand Canyon for a thrilling rafting trip on the Colorado River and hikes with a geologist. $1,295

WASHINGTON, D.C. ANYTIME
CALL 1-800-528-8167
Any season, any day of the week, discover the treasures of the Nation's Capital at your own pace. Includes a three-night stay at a well-located hotel, a Smithsonian IMAX® presentation, a two-day Tourmobile pass, and more! From $299

INTERNATIONAL JOURNEYS

CROSSROADS OF CULTURES: SICILY & MALTA
MAY 20-30, 2005
From your private sailing yacht, *Pantheon*, discover the cultural heritage of Sicily, the Aeolian Islands, and Malta. See dramatic archaeological sites, springtime landscapes, and azure seas. From $5,995

DANUBE RIVER AND HABSBURG EMPIRE
MAY 25-JUNE 3, 2005
Cruise along the Blue Danube to Vienna and Budapest on the elegant *Amadeus Classic* and travel to Krakow and Prague aboard the historic rail cars of the Majestic Imperator Train de Luxe. From $3,470

CELTIC LANDS
JUNE 1-14, 2005
Sailing on a favorite ship, *Le Diamant* (formerly the *Song of Flower*), discover the legacy of the Celts in France, England, Ireland, Wales, and Scotland. From $6,195

ICELAND: VOLCANOES, GLACIERS, AND GEYSERS
JUNE 20-30, 2005
View the beauty of Iceland's natural wonders–steaming geysers, massive glaciers, thundering waterfalls, and plunging fjords. $5,495

MONGOLIA: LAND OF THE NOMAD
JULY 1-14, 2005
Experience the enthralling competitions at Mongolia's celebrated Naadam Festival, meet local families, and witness the ancient customs of one of the world's last surviving nomadic cultures. $3,995

VALUE-PRICED JOURNEYS

SMITHSONIAN JOURNEYS
TRAVEL ADVENTURES
with Collette Vacations
Call 1-800-528-8167

SPIRIT OF WASHINGTON, D.C.
MAY 5-10 AND JULY 14-19, 2005
Enjoy visits to the newest Smithsonian museums, including the National Museum of the American Indian and the National Air and Space Museum's Udvar-Hazy Center, and the impressive World War II Memorial. From $849

GREAT TRAINS, WINERIES, AND CULTURES OF AUSTRALIA AND NEW ZEALAND
MAY 14-JUNE 10, 2005
Experience the natural wonders and diverse cultures of Australia and New Zealand. Travel on historic trains and enjoy wine tastings at renowned vineyards. From $5,199

RUSSIAN RIVER CRUISE
JUNE 9-22 AND JULY 5-18, 2005
Discover Russia's rural and urban landscape as you cruise from the dynamic city of Moscow to the opulent splendor of imperial St. Petersburg. From $2,847

For information on any of our 250 worldwide tours call 1-877-EDU-TOUR (1-877-338-8687) or visit www.SmithsonianJourneys.org
All prices are per person, based on double occupancy.

SmithsonianJourneys.org

An elated Washington wrote to his brother John Augustine of the retreating British forces (a c. 1850 engraving): "We . . . beat them in a shameful and precipitate manner out of a place the strongest by nature on this continent."

LIBRARY OF CONGRESS

the general in after-dinner sessions, when Washington liked to encourage conversation as he ate nuts and drank a glass of Madeira. Part extended family and part court, these favored aides traded influence for total loyalty. "It is absolutely necessary therefore, for me to have persons that can think for me," Washington explained, "as well as execute Orders." The price for what he called his "unbounded confidence" was their equally unbounded service to his reputation. It was understood as a matter of honor that they would write no revealing memoirs after the war, and none of them did.

His other "family" was the cast of senior officers that assembled around him during the siege of Boston. Of the 28 generals who served under Washington in the war, almost half were present at Cambridge in 1775–76. Four of them—Charles Lee, Horatio Gates, Nathanael Greene and Henry Knox—provide the outline of the prevalent patterns that would shape his treatment of high-ranking subordinates.

Lee and Gates were both former officers in the British Army with greater professional experience than Washington. Lee was a colorful eccentric. The Mohawks had named him Boiling Water for his fiery temperament, which at Cambridge took the form of threats to place all deserters on a hill as targets within musket-shot of British pickets. Lee presumed a greater familiarity with Washington than other generals, addressing him as "My Dear General" rather than "His Excellency." Lee also questioned Washington's preferred strategy of engaging British regulars on their own terms in a European-style war, favoring guerrilla tactics and a greater reliance on militia. Gates was called Granny Gates because of his age (he was 50) and the wire-rimmed spectacles dangling from his nose. He cultivated a greater fa-

miliarity with his troops than Washington thought appropriate and, like Lee, favored a greater reliance on militia. Gates thought that Washington's plan for an assault on the British garrison in Boston was pure madness and, given his experience, felt free to speak out for a more defensive strategy. Both men ended up colliding with Washington later in the war and becoming early exhibits of the primal principle of revolutionary-era politics: cross Washington and you risk ruination.

Greene and Knox were both inexperienced amateurs drawn to military service by their zeal for American independence. Greene was a Rhode Island Quaker who was cast out of the Society of Friends because of his support for the war. He volunteered to serve in a local militia company, the Kentish Guards, at the rank of private, but ascended to brigadier general within a year on the basis of his obvious intelligence and disciplined dedication. By the end of the war, especially during the Carolina campaigns, he demonstrated strategic and tactical brilliance; he was Washington's choice as successor if the great man went down in battle. Knox was also a gifted amateur, a Boston bookseller well read in engineering whom Washington plucked from the ranks to head an artillery regiment. Knox demonstrated his resourcefulness in December 1775 by transporting the British cannon captured at Ticonderoga over the ice and snow on 40 sleds driven by 80 yoke of oxen to Cambridge. Like Greene, he worshiped the ground Washington walked on. Both men were subsequently showered with glory, Knox living on to become Washington's secretary of war in the 1790s.

The pattern is reasonably clear. Washington recruited military talent wherever he could find it, and he had a knack for discovering ability in unlikely places and then allowing it to ride the same historical wave he was riding into the American pantheon. But he was extremely protective of his own authority. While he did not encourage sycophants, if dissenters ever broached their criticism out-of-doors, as both Lee and Gates ended up doing, he was usually unforgiving. One could make a plausible case, as several scholars have done, that Washington's insistence on personal loyalty was rooted in insecurity. But the more compelling explanation is that he understood instinctively how power worked, and that his own quasi-monarchical status was indispensable to galvanize an extremely precarious cause.

From the very start, however, he made a point of insisting that his expansive mandate was dependent upon, and subordinate to, the will of the American citizenry as represented in the Continental Congress. His letters to John Hancock, the first president of the Congress, always took the form of requests rather than demands. And he established the same posture of official deference toward the New England governors and provincial governments that supplied troops for his army. Washington did not use the term "civilian control," but he was scrupulous about acknowledging that his own authority derived from the elected representatives in the Congress. If there were two institutions that embodied the emerging nation—the Continental Army and the Continental Congress—he insisted that the former was subordinate to the latter.

For taking Boston, Washington became the first recipient of what is today known as the Congressional Gold Medal.

BOSTON PUBLIC LIBRARY, BOSTON MASSACHUSETTS

A DELEGATION from the Continental Congress that included Benjamin Franklin met with Washington and his staff in Cambridge in October 1775 to approve troop requests for an army of 20,372 men. But strictly speaking, the Continental Army did not exist until the start of the new year; until then, Washington was commanding a collection of provincial militia units whose enlistments ran out in December 1775. The endorsement of Washington's troop requests by the Continental Congress was deceptively encouraging, since compliance depended upon approval by the respective state governments, which insisted that all recruits be volunteers and serve limited terms of no more than one year. But in reality, the vaunted principles of state sovereignty, volunteerism and limited enlistments produced a military turnstile that bedeviled Washington throughout the war. Instead of a hard core of experienced veterans, the Continental Army became a constantly fluctuating stream of amateurs, coming and going like tourists.

In this first year of the war, when the revolutionary fires burned their brightest, Washington presumed that he would enjoy a surplus of recruits. In October 1775 a council of war voted unanimously "to reject all slaves & by a great Majority to reject Negroes altogether." The following month Washington ordered that "Neither Negroes, Boys unable to bear arms, nor old men unfit to endure the fatigues of the campaign, are to be enlisted." But within a few months, as it became clear that there would not be enough new recruits to fill the ranks, he was forced to change his mind: "It has been represented to me," he wrote Hancock, "that the free negroes who have Served in this Army, are very much dissatisfied at being discarded—and it is to be apprehended that they may Seek employ in the ministerial Army—I have presumed to depart from the Resolution respecting them, & have given licence for them being enlisted; if this is disapproved of by Congress, I will put a stop to it." In this backhanded fashion Washington established the precedent for a racially integrated Continental Army, except for a few isolated incidents the only occasion in American military history when blacks and whites served alongside one another in the same unit until the Korean War.

Goose Down Robe

Supersoft easy care cotton fabric. Shawl collar and roll back cuffs. Cream, peach, bluette, white, navy, burgundy or teal. Sizes XS, S, M, L. Reg. $160, **Sale $89**. S&H $7.95. Matching Goose Down Slippers in sizes XS, S, M, L. Reg $38, **Sale $22**. S&H $4.95. Order by phone, Website or Mail. MC, Visa or Check. Call 415-472-2154 CA residents add 7.25% tax.

FREE SHIPPING & HANDLING when you purchase both Robe & Slippers.

Terry Robe. Ultra-soft 100% cotton. White or navy. Women & Mens sizes, S, M, L, XL. Reg. $110, **Sale $59**. S&H, $7.95.

WARM THINGS

180 Paul Dr., Dept. SO
San Rafael, CA 94903
415-472-2154
Ship within 48 hrs.

www.warmthingsonline.com

archaeological tours
led by noted scholars
superb itineraries, unsurpassed service

2005 TOURS

WINTER
Egypt
Sri Lanka
Egypt for Grandparents & Grandchildren
Maya Superpowers
Vietnam
South India
East India
Italy: Byzantine to Baroque

SPRING
Malta, Sardinia & Corsica
Libya
China: Silk Road
Sicily & So.Italy
Cyprus, Crete & Santorini
China: Sacred Landscapes
Tunisia

SUMMER
Eastern Turkey
Etruscan Italy
Ireland
Peru

FALL/WINTER
Central Asia
Japan
Prehistoric Caves Spain & France
Egypt
Georgia & Armenia
Maritime Turkey & North Cyprus
Oases of the Western Desert
Jordan In Depth
Eritrea & Ethiopia
Paris Museums
Northern India
Sicily & So. Italy
Khmer Kingdoms
Maya Superpowers
Mali

271 madison avenue. 904sm, ny, ny 10016
(212) 986-3054 toll free: (866) 740-5130
www.archaeologicaltrs.com

Snowy River

Akubra®
Made in Australia

From the great Australian outback, a pure fur felt hat for sun or rain. Fully lined, 3 1/4" brim.

No. 1611 Snowy River.....$110

Sizes: 6 3/4-8 1/8, colors: Fawn, Gray or Black. Add $7 for handling. Satisfaction guaranteed.

Visit our web site or request our unique catalog

Bosca® Leather goods • Celtic Jewelry
Filson® Clothing and Luggage

800-324-4934 davidmorgan.com

David Morgan
11812 N Creek Pkwy N, Ste 103•Bothell WA 98011

THE SIEGE OF BOSTON also afforded the first extended glimpse at Washington's cast of mind as a military strategist. His motives for supporting American independence were always more elemental than refined. Essentially, he saw the conflict as a struggle for power in which the colonists, if victorious, destroyed British presumptions of superiority and won control over half a continent for themselves. While it would be somewhat excessive to say that his central military goal was an equally elemental urge to smash the British Army in one decisive battle, there was a tendency to regard each engagement as a personal challenge to his own honor and reputation. At Cambridge, once it became clear that General Howe was unwilling to come out from behind his Boston redoubts and face him in open battle, it took the form of several risky offensive schemes to dislodge the British regulars. On three occasions, in September 1775, then again in January and February 1776, Washington proposed frontal assaults against the British defenses, arguing that "a Stroke, well aim'd at this critical juncture, might put a final end to the War." (In one of the plans, he envisioned a night attack across the ice with advanced units wearing ice skates.) His staff rejected each proposal on the grounds that the Continental Army lacked both the size and the discipline to conduct such an attack with sufficient prospects for success. Eventually, Washington accepted a more limited tactical scheme to occupy Dorchester Heights, which placed Howe's garrison within range of American artillery, thereby forcing Howe's decision to evacuate or see his army slowly destroyed. But throughout the siege Washington kept looking for a more direct and conclusive battle, suggesting that he himself was ready for a major engagement even if his army was not.

His most aggressive proposal, which *was* adopted, called for a separate campaign against Quebec. Once it was clear that Howe did not intend to oblige him by coming out of Boston, Washington decided to detach 1,200 troops from

ARCTIC ODYSSEYS™

Polar Bears to Penguins
North Pole to South
All Polar destinations between
Auroras to rare wildlife

The ARCTIC & ANTARCTIC
Air, Land, and Cruise Specialists!
(800) 574-3021 / FAX (206) 726-8488
www.ArcticOdysseys.com

Just Strings

- *Strings for Musical Instruments*
- *Guitar, Bass, Orchestral, Folk & Ethnic*
- *World's Largest Selection*

www.juststrings.com

COUNTRY WALKERS®

Walk the World

Small group walking tours and active itineraries

FREE catalog · 800.464.9255 · www.countrywalkers.com
A GRAND EXPEDITIONS COMPANY

Exotic Places

cultural tours with groups of 10-15 only!

1-800-762-4216 • www.tci-travel.com

AUTHORS WANTED

Leading subsidy book publisher seeks manuscripts. Fiction, non-fiction, poetry, juvenile, religious, etc. New authors welcomed. For free 32-page illustrated guide-book **TD-72** call **1-800-821-3990** or write to **Vantage Press, 419 Park Ave S., New York, NY 10016**

RETIRE TO CHAPEL HILL, NC

Fearrington Village is full of bluebirds, hollyhocks, belted cows, and fascinating people of all ages.

800.277.0130 www.fearrington.com

SWISS ALPS—Day hiking since 1977

Optional length - Two guides per tour allow choice of moderate or more strenuous hike daily - Basing weekly in charming mountain villages - Call toll free for color brochure.

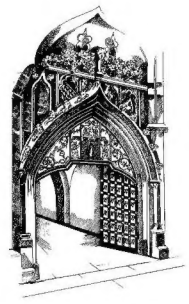
1-888-478-4004
www.swisshiking.com

European Beret $10

100% Wool • One Size Fits All
Black, Navy, Brown, Red, Camel, Grey
Check or Credit Card w/Exp. Date.
Add $2 shipping per order
www.johnhelmer.com

John Helmer • Est. 1921 • (503) 223-4976
969 S.W. Broadway, Dept. S015 • Portland, OR 97205

18th Year
Free Catalog
Cross-Culture
Travel With A Difference



In-Depth Experiential Tours, Small-Ship Educational Cruises & Hiking Plus Programs with the benefits of ALL-INCLUSIVE Small-Group Travel (average of 15–25 participants on land tours). Off-the-beaten track itineraries in over 35 countries; Europe, Asia, Australia & New Zealand, India, Libya, Antarctica.

1-800-491-1148 www.crossculturein c.com

EUROPE, RUSSIA & CHINA RIVER CRUISES FROM $999

Cruise with English-speaking guides on 7 - 18 night trips with *Conde Nast Traveler's* "Gold List" winner and #1 River Cruise Line, **Viking River Cruises**. 124-306 passenger deluxe ships. All river-view cabins, gourmet food, included shore tours. Call today for FREE BROCHURE: **1-800-510-5461** or sign up for email specials, and free brochure at *vikingrivercruises.com*.

CST: #2052644-40 VIKING RIVER CRUISES

China, Crystal, Silver & Collectibles
Old & New • Buy & Sell
10 Million Pieces
183,000 Patterns
Call for FREE lists of each of your patterns.
1-800-REPLACE
(1-800-737-5223)
PO Box 26029, Dept. SM
Greensboro, NC 27420
www.replacements.com®
REPLACEMENTS, LTD.

MEN'S WIDE SHOES
EEE-EEEEEE, SIZES 5-15
• FREE catalog
• High quality
• 200 styles

HITCHCOCK SHOES, INC.
Dept. 21A Hingham, MA 02043
1-800-992-WIDE www.wideshoes.com

Cambridge and send them up the Kennebec River into Canada under the command of a young colonel named Benedict Arnold. Washington's thinking reflected his memories of the French and Indian War, in which Canadian forts had been the strategic keys to victory, as well as his belief that the stakes in the current war included the entire eastern half of North America. As he put it to Arnold, "I need not mention to you the great importance of this place & the consequent possession of all Canada in the Scale of American affairs—to whomsoever It belongs, in there [sic] favour probably, will the Balance turn."

However conventional his thinking about Quebec's strategic significance, Washington's commitment to a Canadian campaign was recklessly bold. Arnold's force had to traverse 350 miles of the most difficult terrain in New England during the outset of the winter snows. Within a month the troops were eating their horses, dogs and moccasins, dying by the scores from exposure and disease. After a truly heroic effort, Arnold and his troop linked up with a force commanded by Gen. Richard Montgomery as planned and made a desperate night assault on Quebec in a blinding snowstorm on December 31, 1775. The result was a catastrophic defeat, both Arnold and Montgomery falling in the first minutes of the battle. (Arnold suffered a serious leg wound but survived, while Montgomery had his face shot off and died on the spot.) If Canada was the key, the British now held it more firmly than before. The Quebec debacle was a decisive blow, but not the kind Washington had intended.

Finally, the Cambridge chapter revealed another Washington trait that has not received sufficient attention in the existent scholarship because it is only indirectly connected to military strategy. Historians have long known that more than two-thirds of the American casualties in the war were the result of disease. But only recently—and this is rather remarkable—have they recognized that the American Revolution occurred within a virulent small-

With two staff to every guest, everything's at hand without lifting a finger

Set in the lush hillside of Ocho Rios, Jamaica, this extraordinary 77-suite beachfront boutique hotel elevates Caribbean luxury to its highest level with unmatched service and every world-class amenity.

For more information, call your travel professional at: 1-888-48-ROYAL or www.royalplantation.com

ROYAL PLANTATION®
OCHO RIOS, JAMAICA

A member of
The Leading Small Hotels of the World®

Recognized as a Leading Spa by The Leading Hotels of the World

The Toughest Glue On Planet Earth

Wood, Stone, Metal, Ceramic, & More!
REQUEST YOUR FREE INFORMATION KIT!
www.gorillaglue.com
1-800-966-3458

POLAR BEARS
Visit the world's greatest destination for viewing polar bears and other northern wildlife—Spitsbergen, the crown jewel of the Arctic!

TravelWild EXPEDITIONS
800-368-0077
www.travelwild.com

Swim at Home™...

When exercise is a pleasure, fitness is easy...
Swim against a smooth current adjustable to any speed or ability. Ideal for exercise, water aerobics, rehabilitation and fun. Just 8' x 15', an **Endless Pool**™ is simple to maintain, economical to run, and easy to install inside or out.
For Our Free DVD or Video Call: (800) 233-0741, Ext. 3732
ENDLESS POOLS
www.endlesspools.com/3732
200 E Dutton Mill Rd, Aston, PA 19014

www.dallaspridgenjewelry.com
DALLAS PRIDGEN JEWELRY
One at a time, by hand

Rabbits Bracelet, 9 links *Sterling $165 • 14K Gold $595*
Pendant *Sterling $35 • 14K Gold $80*
Unconditionally guaranteed **1·800·477·1856**
PO Box 147 • Chapel Hill, NC 27514

FACES OF MELANESIA
Papua New Guinea | Solomon Islands | Vanuatu | New Caledonia
Exhilirating performances by native islanders, lush tropical landscapes, and superb snorkeling and diving. Discover Melanesia aboard the 110-passenger *Clipper Odyssey*.
Oct 18 – Nov 4, 2005

ZEGRAHM EXPEDITIONS
(800) 628-8747 | www.zeco.com

pox epidemic of continental scope that claimed about 100,000 lives. Washington first encountered the epidemic outside Boston, where he learned that between 10 and 30 funerals were occurring each day because of the disease. British troops, though hardly impervious to the smallpox virus, tended to possess greater immunity because they came from English, Scottish and Irish regions, where the disease had existed for generations, allowing resistance to build up within families over time. Many soldiers in the Continental Army, on the other hand, tended to come from previously unexposed farms and villages, so they were extremely vulnerable. At any point in time, between one-fourth and one-fifth of Washington's army at Cambridge was unfit for duty, the majority down with smallpox.

Washington, of course, was immune to smallpox because of his exposure to it as a youth on a trip to Barbados (his one and only foreign excursion) in 1751. (Subsequent admirers claimed that he was immune to everything.) Equally important, he understood the ravaging implications of a smallpox epidemic within the congested conditions of his encampment, and he quarantined the patients in a hospital at Roxbury. When the British began their evacuation of Boston in March 1776, he ordered that only troops with pockmarked faces be allowed into the city. And although many educated Americans opposed inoculation, believing that it actually spread the disease, Washington strongly supported it. It would take two years before inoculation became mandatory for all troops serving in the Continental Army, but the policy began to be implemented in the first year of the war. When historians debate Washington's most consequential decisions as commander in chief, they almost always argue about specific battles. A compelling case can be made that his swift response to the smallpox epidemic and to a policy of inoculation was the most important strategic decision of his military career.

After lingering in Boston Harbor for over a week, the British fleet sailed

Aviation Models

for the discriminating collector!
The world's finest hand-made military, civilian and airline models.
Hand-carved from solid mahogany and completely hand-painted.
Over **500** models available in stock! Personalized custom models are also available.
www.warplanes.com
Call for FREE Color Catalog or visit us online.
(800) 950-9944
PACIFIC AIRCRAFT
15820 North 84th Street
Scottsdale, AZ 85260

Shawls and Capes...
Our hand-crafted capes and shawls embrace you in the elegance and comfort of 100% Merino Wool.
CB Casco Bay Wool Works

For information on our other fine products or to order call **1-888-222-WOOL (9665)**
Online at: www.cascobaywoolworks.com
The Casco Bay Shawl $175.00; in 100% Black Cashmere $495.00

Sail Maine

14 Tall Ships.
3-6 day cruises from $395.
1-800-807-WIND www.sailmainecoast.com

AFRICA • CHINA • INDIA • JAPAN • NEPAL • SRI LANKA • TAIWAN
Since 1989
UPTON TEA IMPORTS
Purveyor of the World's Finest Teas
1-800-234-8327
www.uptontea.com
Free catalog listing over 320 varieties of garden-fresh, loose tea
34 A Hayden Rowe St.*Hopkinton, MA 01748

Native Islander Gullah Celebration
South Carolina
Smiling Faces. Beautiful Places.
Hilton Head Island
February 4-27, 2005
Celebrate the Arts, Culture and Heritage of the Gullah People.
www.gullahcelebration.com
877-650-0676

THE FAMOUS
Stave Jigsaw Puzzles
Since 1974, crafting the finest handcut wooden jigsaw puzzles.
$95 - $4000. *Free catalog.*

www.stave.com 802-295-5200
Stave Puzzles, Norwich, Vermont

McBooks Press delivers the Masters of Naval Fiction—
Kent • Pope • Lambdin • Forester
O'Brian • Woodman • Reeman ***and more***
Free catalog: **1-888-266-5711** toll-free, or **www.mcbooks.com**
Great selection of new, rare, & hard-to-find titles, plus free shipping on orders over $50!

away on March 17, 1776. The American press reported the retreat as a crushing blow to the British Army. The Continental Congress ordered a gold medallion cast in Washington's honor. Harvard College awarded him an honorary degree. And John Hancock predicted that he had earned "a conspicuous Place in the Temple of Fame, which Shall inform Posterity, that under your Directions, an undisciplined Band of Husbandmen, in the Course of a few Months became Soldiers," defeating "an Army of Veterans, commanded by the most experienced Generals."

As uplifting as this appraisal may have been, subsequent events would soon show that it was overly optimistic. Washington was not, by any standard, a military genius. He lost more battles than he won; indeed, he lost more battles than any victorious general in modern history. Moreover, his defeats were frequently a function of his own overconfident personality, especially during the early stages of the war, when he escaped to fight another day only because the British generals opposing him seemed choked with the kind of caution that, given his resources, Washington should have adopted as his own strategy.

But in addition to being fortunate in his adversaries, Washington was blessed with the personal qualities that counted most in a protracted war. He was composed, indefatigable and able to learn from his mistakes. He was convinced that he was on the side of destiny—or, in more arrogant moments, sure that destiny was on his side. Even his critics acknowledged that he could not be bribed, corrupted or compromised. Based on his bravery during several battles, he apparently believed he could not be killed. Despite all his mistakes, events seemed to align themselves with his own instincts. He began the war in July 1775 at the siege of Boston determined to deliver a decisive blow against more disciplined and battle-tested British regulars. He would end it in October 1781 at the siege of Yorktown doing precisely that.

YACHT-STYLE CRUISES

PANAMA, BAHAMAS, BELIZE, ROATAN, U.S. INTRACOASTAL

Culturally and visually inspiring vacations offering unique small ship adventures to tropical isles and historic coastal waterways. Go where the big ships cannot. US Flag, Only 100 guests. Casual, kayaks, memorable camaraderie, swim platform.

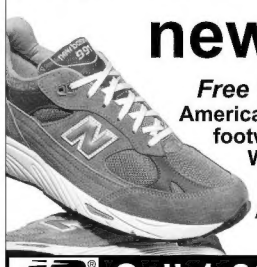
800-556-7450

AMERICAN CANADIAN CARIBBEAN LINE

www.accl-smallships.com

Keep Your Feet Fit

new balance



Free Catalog - Over 50 styles of America's finest brand of performance footwear. Men's & women's styles. Widths AA-EEEEEE. Sizes 5-20.

Satisfaction Guaranteed

Active Soles 318 Court St Plymouth, MA 02360

www.activesoles.com

Call 1-800-881-4322

bike riders

THE ART OF TRAVELING WELL℠

BIKING, WALKING & GUEST CHEF ADVENTURES
NEW ENGLAND, CANADA & EUROPE
FREE CATALOG

800.473.7040 | www.bikeriderstours.com

Over 600 Pirate Treasures!

World's best selection of pirate flags, music, toys, books, jewelry, treasure, posters, vices, games, sodas, party supplies, hats, clothing, and glow-in-the-dark boxer shorts.

Free catalog.

www.DeadMenTellNoTales.com • 800-770-9807

Smithsonian (ISSN 0037-7333) is published monthly by Smithsonian Business Ventures, P.O. Box 37012, MRC 951, Washington, D.C. 20013. © Smithsonian Institution 2005. All rights reserved. Reproduction in whole or in part without permission is prohibited. Editorial offices are at MRC 951, Washington, D.C. 20013 (202-275-2000). Advertising and circulation offices are at 420 Lexington Ave., New York, NY 10170 (212-490-2510). **MEMBERSHIP DUES/ SUBSCRIPTION PRICES:** All subscribers to Smithsonian are members of the Smithsonian Institution. United States and possessions: $34 a year payable in U.S. funds. Canada add $13 (U.S. funds) for each year. Foreign add $26 (U.S. funds) for each year. Ninety percent of dues is designated for magazine subscriptions. Current issue price is $4 (U.S. funds). Back issue price is $5 (U.S. funds). Periodical postage paid at Washington, D.C. and additional mailing offices. **MAILING LISTS:** From time to time we make our subscriber list available to companies that sell goods and services we believe would interest our readers. If you would rather not receive this information, please send your current mailing label, or an exact copy, to: Smithsonian, Mail Preference Service, P.O. Box 420311, Palm Coast, FL 32142-0311. **SUBSCRIPTION SERVICE:** Should you wish to change your address, or order new subscriptions, you can do so by writing Smithsonian, P.O. Box 420311, Palm Coast, FL 32142-0311, or by calling 1-800-766-2149 (outside of U.S., call 1-386-447-2721). Postmaster: Send address changes to Smithsonian, P.O. Box 420312, Palm Coast, FL 32142-0312. Printed in the USA. Canadian Publication Agreement No. 40043911. Canadian return address: Station A, P.O. Box 54, Windsor, Ontario N9A 6J5.

CONTROL DUST WHEN REMODELING

ZIPWALL®

DUST BARRIER SYSTEMS

SLP™

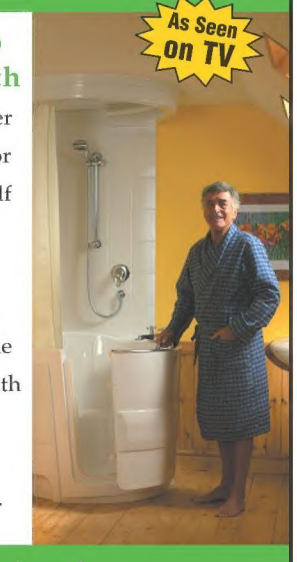
Spring Loaded Poles can put up a dust barrier in minutes.

- Easy to install
- No tape needed
- No ladders

For information on where to purchase, please call 1 800 718 2255 or visit our website: www.zipwall.com

"It's so easy, I just open the door and step in..."

...I really used to enjoy having a bath but I realized as I got older that the fear of slipping, or the effort of pulling myself up after I had finished bathing was becoming a real problem... Premier Bathrooms has the largest range of walk-in bath tubs in the country, and buying one helped me regain my independence.



For further details or to receive your FREE brochure

CALL NOW TOLL FREE 1-800-578-2899

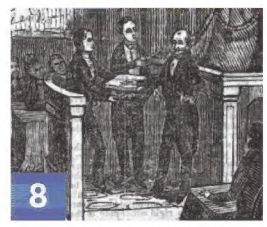
Premier™ BATHROOMS

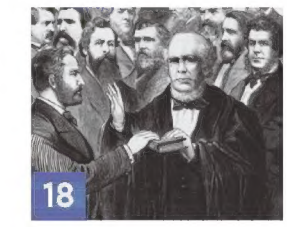
Remember -

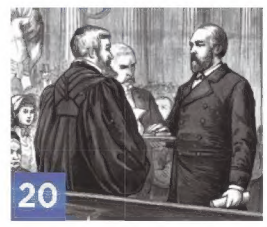
Premier's Walk-In Bath Tubs give you independence, security and confidence to enjoy your bathroom again.

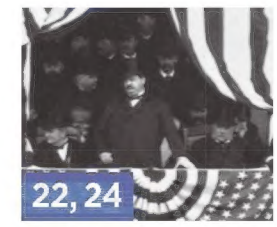
"I Do Solemnly Swear..."

On January 20, for the 64th time in history, an American president will take the oath of office









1. George Washington **2.** John Adams **3.** Thomas Jefferson **4.** James Madison **5.** James Monroe **6.** John Quincy Adams **7.** Andrew Jackson **8.** Martin Van Buren **9.** William H. Harrison **10.** John Tyler **11.** James K. Polk **12.** Zachary Taylor **13.** Millard Fillmore **14.** Franklin Pierce **15.** James Buchanan **16.** Abraham Lincoln **17.** Andrew Johnson **18.** Ulysses S. Grant **19.** Rutherford B. Hayes **20.** James A. Garfield **21.** Chester A. Arthur **22.** Grover Cleveland **23.** Benjamin Harrison **24.** Grover Cleveland **25.** William McKinley **26.** Theodore Roosevelt **27.** William H. Taft **28.** Woodrow Wilson **29.** Warren G. Harding **30.** Calvin Coolidge **31.** Herbert C. Hoover **32.** Franklin D. Roosevelt **33.** Harry S. Truman **34.** Dwight D. Eisenhower **35.** John F. Kennedy **36.** Lyndon B. Johnson **37.** Richard M. Nixon **38.** Gerald R. Ford **39.** James E. Carter **40.** Ronald W. Reagan **41.** George H.W. Bush **42.** William J. Clinton **43.** George W. Bush

CORBIS, US DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE, ADAMS NATIONAL HISTORIC PARK, CHRISTIE'S IMAGES / BRIDGEMAN ART LIBRARY; CORBIS (3), ROGER-VIOLLET, PARIS / BRIDGEMAN ART LIBRARY, CORBIS (3); LIBRARY OF CONGRESS, CORBIS (2); LIBRARY OF CONGRESS (2), CORBIS (3); LIBRARY OF CONGRESS; CORBIS (11); REUTERS / CORBIS